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UNITED STATES NATIONAL MUSEUM
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NATIONAL MUSEUM

A LIST AND INDEX OF THE PUBLICATIONS OF THE UNITED STATES NATIONAL MUSEUM (1875-1946)

Compiled in the Editorial Division
Smithsonian Institution

[PUBLISHED AS A PART OF THE OFFICIAL OBSERVANCE OF THE ONE-HUNDREDTH ANNIVERSARY OF THE FOUNDING OF THE SMITHSONIAN INSTITUTION]

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It is chiefly by the publications of the Institution that its fame is to be spread through the world, and the monument most befitting the name of Smithson erected to his memory.

Joseph Henry

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A LIST AND INDEX OF THE PUBLICATIONS OF THE UNITED STATES NATIONAL MUSEUM (1875-1946)

Compiled in the Editorial Division, Smithsonian Institution

PREFACE

ONLY once before has there been issued a complete list, with index, of the publications of the National Museum. This was entitled "A List of the Publications of the United States National Museum (1875-1900)" and was published in 1902 as U. S. National Museum Bulletin No. 51. It was compiled by Randolph I. Geare, chief of the Division of Correspondence and Documents, and aggregated 168 printed pages. A supplement was issued four years later, bringing the list through the year 1906.

Forty years have thus elapsed, and it is therefore felt that the present work is long overdue. Inasmuch as publication (i.e., the "diffusion of knowledge") is one of the two prime functions of the Smithsonian Institution, another complete list is especially appropriate this year (1946) when the one-hundredth anniversary of the Institution's founding is being observed. Since Bulletin 51 has long been out of print, the present list has been made all-inclusive, covering the entire 71-year span of Museum publication.

The publications of the National Museum have appeared in five series as follows: the Annual Reports, the Bulletins, the Proceedings, the Special Bulletins, and the Circulars. The Reports previous to 1905 were large volumes containing, in addition to the administrative reports, papers based upon the Museum collections and upon its explorations and researches. Examples of these are such monumental contributions as Donaldson's monograph on the George Catlin Indian Gallery, Hornaday's "Extinction of the American Bison," Goode's "The Museums of the Future," and Ridgway's "The Humming Birds." Since 1905 the Reports have been without the supplemental papers but have continued the lists of all the accessions received each year by the Museum.

The first of the Bulletins was issued in 1875. This series contains separate publications of monographic proportions—systematic treatises, faunal works, reports of expeditions, catalogs of type specimens and special collections—and in all fields of the Museum's scientific work. To date, 193 Bulletins have been issued, some of them in several volumes (as Nos. 47, 50, 71, 82, 100, 104). In this series also are included the Contributions from the United States National Herbarium, now in their thirtieth volume, containing papers relating to the botanical collections of the Museum. In all, therefore, the Bulletin series aggregates nearly 300 separate volumes.

Of the Proceedings, begun in 1878, 96 volumes have been published, comprising a total of 3,204 separate papers. This series, for the most part,

contains technical papers in biology, geology, and anthropology, based on the Museum's collections in these fields. Most of them are taxonomic in character, since one of the principal tasks of Museum curators is to name and arrange in systematic order the specimens and objects under their care. Copies of each paper, in pamphlet form, are distributed as published to libraries and scientific organizations and to specialists and others interested in the different subjects. The dates at which these separate papers are published are recorded in the table of contents of each of the completed volumes.

No Circular has been issued since 1929, and the quarto series of Special Bulletins stopped with the final part of No. 4 in 1915.

There have been three editors of the National Museum publications: A. Howard Clark, who served from 1879 to 1896; Marcus Benjamin, from 1896 to 1931; and Paul H. Oehser, the present editor, who succeeded Dr. Benjamin in 1931.

The original distribution of all Museum publications is designed to make them as widely available as possible, in view of the relatively small editions printed. They are sent free to libraries and scientific establishments throughout the world, to specialists in the particular fields of science involved, and to others interested who may request copies. Small editions of the Bulletins and Reports are printed for sale by the Superintendent of Documents, United States Government Printing Office. Only the most recent publications are now available, the earlier numbers (except in rare instances) being long out of print. Information as to the availability of any particular number may be obtained by addressing the Division of Publications, Smithsonian Institution, Washington 25, D. C.

The present list and index have been compiled in the Editorial Division of the Smithsonian Institution, under the direction of Webster P. True, chief, and Paul H. Oehser, assistant chief. The classified index of titles is the work of Miss Gladys O. Visel, editorial clerk; while Mrs. Phyllis W. Prescott and Miss Ruth B. MacManus have aided in assembling the list. Lester E. Commerford, chief of the Division of Publications, has been most helpful in supplying dates and other information.

Scientific bibliographies and indexes rarely need apology, since they are the acknowledged indispensable tools of scientists, teachers, students, librarians, and editors. The present list is no exception, the only regret being that it was not found practicable at this time to list under one cover all the publications of the Smithsonian Institution. Such a comprehensive list would include the publications of the Smithsonian proper, the Bureau of American Ethnology, the Astrophysical Observatory, the Freer Gallery of Art, and the National Collection of Fine Arts, as well as those of the National Museum. In lieu of that, the present work is offered, and those who are familiar with matters of scientific literature will know that it represents a notable achievement in the "diffusion of knowledge among men" and one of which James Smithson, founder of the Smithsonian Institution, would have been truly proud.

ANNUAL REPORTS

Report of the Assistant Director of the United States National Museum, G. Brown Goode, for the year 1881.[1] From the Smithsonian Report for 1881. Pp. 1-79.

Report of the Assistant Director of the United States National Museum, G. Brown Goode, for the year 1882. From the Smithsonian Report for 1882. Pp. 1-145.

Report of the Assistant Director and of the curators of the United States National Museum for the year 1883. From the Smithsonian Report for 1883. Pp. 1-200.

Report of the United States National Museum for the year 1884. (Pt. 2 of the Annual Report of the Board of Regents of the Smithsonian Institution for the year 1884.)

- Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-72.
- Pt. 2. Reports of the curators. Pp. 73-276.
- Pt. 3. Scientific papers:
  - No. 1. Throwing-sticks in the National Museum. By Otis T. Mason. Pp. 279-291, 17 pls.
  - No. 2. Basket-work of the North American aborigines. By Otis T. Mason. Pp. 291-306, 64 pls.
  - No. 3. A study of the Eskimo bows in the U. S. National Museum. By John Murdoch. Pp. 307-316, 12 pls.
  - No. 4. On a spotted dolphin apparently identical with the *Prodelphinus doris* of Gray. By Frederick W. True. Pp. 317-324, 6 pls.
  - No. 5. The Florida muskrat (*Neofiber alleni* True). By Frederick W. True. Pp. 325-330, 3 pls.
  - No. 6. On the West Indian seal (*Monachus tropicalis* Gray). By Frederick W. True and F. A. Lucas. Pp. 331-335, 3 pls.
- Pt. 4. Bibliography of the U. S. National Museum for the year 1884. Pp. 337-381.
- Pt. 5. List of accessions to the U. S. National Museum during 1884. Pp. 383-428.

Report of the United States National Museum for the half year ending June 30, 1885.[2] (Pt. 2 of the Annual Report of the Board of Regents of the Smithsonian Institution to July 1885.)

- Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-54.
- Pt. 2. Reports of the curators. Pp. 55-147.
- Pt. 3. Bibliography of the Museum. Pp. 149-174.
- Pt. 4. List of accessions with descriptive notes and indices. Pp. 175-243.
- Pt. 5. The George Catlin Indian Gallery. By Thomas Donaldson. Pp. i-vii, 1-939, 142 pls.

Report of the United States National Museum for the year ending June 30, 1886. (Pt. 2 of the Annual Report of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1886.)

- Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-83.
- Pt. 2. Reports of the curators. Pp. 87-252.
- Pt. 3. Papers describing and illustrating the collections in the U. S. National Museum.
  - No. 1. The meteorite collection in the U. S. National Museum; a catalogue of meteorites represented November 1, 1886. By F. W. Clarke. Pp. 255-265, 1 pl.

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[1] This was the first report on the operations of the National Museum printed under a separate cover. The reports of the Museum for 1881, 1882, and 1883 were first printed in the reports of the Institution for those years and were afterward issued in pamphlet form. The Museum Report for 1884 was the first one to occupy a separate volume of the Smithsonian Report and to be accompanied by papers based upon the collections.

[2] This volume covers only the first six months of the year 1885, since it was decided to issue future reports by fiscal year instead of by calendar year.

No. 2. Gem collection of the U. S. National Museum. By George F. Kunz. Pp. 267-275.

No. 3. The collection of building and ornamental stones in the U. S. National Museum: A hand-book and catalogue. By George P. Merrill. Pp. 277-648, 9 pls.

No. 4. List of specimens of textile fibers and fabrics in the reference series of the Section of Textile Industries of the U. S. National National Museum, June 30, 1886. By Romyn Hitchcock. Pp. 649-655.

No. 5. Preparation of microscopical mounts of vegetable textile fibers. By Romyn Hitchcock. Pp. 657-658.

No. 6. How to collect mammal skins for purposes of study and for mounting. By William T. Hornaday. Pp. 659-670, 9 figs.

Pt. 4. Bibliography of the Museum. Pp. 671-699.

Pt. 5. List of accessions with descriptive notes and indices. Pp. 701-811.

Report of the United States National Museum for the year ending June 30, 1887. (Pt. 2 of the Annual Report of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1887.)

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-62.

Pt. 2. Reports of the curators. Pp. 65-158, 2 figs., 1 pl.

Pt. 3. Papers illustrative of the collections in the U. S. National Museum.

No. 1. Cradles of the American aborigines. By Otis T. Mason. Pp. 161-212, 45 figs.

No. 2. Notes on the artificial deformation of children among savage and civilized peoples. [With bibliography.] By J. H. Porter. Pp. 213-235.

No. 3. The human beast of burden. By Otis T. Mason. Pp. 237-295, 54 figs.

No. 4. Ethno-conchology: A study of primitive money. By Robert E. C. Stearns. Pp. 297-334, 22 figs., 9 pls.

No. 5. A preliminary catalogue of the Eskimo collection in the U. S. National Museum, arranged geographically and by uses. By T. Dix Bolles. Pp. 335-365.

No. 6. The extermination of the American bison, with a sketch of its discovery and life history. By William T. Hornaday. Pp. 367-548, 21 pls., 1 map.

No. 7. The preservation of museum specimens from insects and the effects of dampness. By Walter Hough. Pp. 549-558, 4 figs.

Pt. 4. Bibliography of the Museum. Pp. 561-594.

Pt. 5. List of accessions, with descriptive notes. Pp. 597-725.

Report of the United States National Museum for the year ending June 30, 1888. (Pt. 2 of the Annual Report of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1888.)

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-84.

Pt. 2. Reports of the curators. Pp. 85-222.

Pt. 3. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. The Coast Indians of southern Alaska and northern British Columbia. By Albert P. Niblack. Pp. 225-386, 360 figs. (most of them appearing on 70 pls., a few in the text), 2 charts.

No. 2. A catalogue of the Hippisley collection of Chinese porcelains: With a sketch of the history of ceramic art in China. By Alfred E. Hippisley. Pp. 387-491.

No. 3. The expedition to Funk Island, with observations upon the history and anatomy of the great auk. By Frederic A. Lucas. Pp. 493-529, 3 pls.

No. 4. Fire-making apparatus in the U. S. National Museum. By Walter Hough. Pp. 531-587, 60 figs. (some of them appearing on 8 pls.).

No. 5 The collection of Korean mortuary pottery in the U. S. National Museum. By Pierre Louis Jouy. Pp. 589-596, 5 pls., 1 map.

No. 6. A study of prehistoric anthropology. By Thomas Wilson. Pp. 597-671, 43 figs., 20 pls.

No. 7. Ancient Indian matting—from Petit Anse Island, Louisiana. By Thomas Wilson. Pp. 673-675, 1 pl.

No. 8. Results of an inquiry as to the existence of man in North America during the Paleolithic period of the Stone Age. By Thomas Wilson. Pp. 677-702, 14 figs.

Pt. 4. Bibliography of the Museum. Pp. 705-734.

Pt. 5. List of accessions. Pp. 737-819.

Report of the United States National Museum for the year ending June 30, 1889.

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-277.

Pt. 2. Reports of the curators. Pp. 281-423, 11 pls.

Pt. 3. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. The museums of the future. By G. Brown Goode. Pp. 427-445.

No. 2. Te Pito Te Henua, or Easter Island. By William J. Thomson. Pp. 447-552, 20 figs., 49 pls.

No. 3. Aboriginal skin-dressing; a study based on material in the U. S. National Museum. By Otis T. Mason. Pp. 553-589, 33 pls.

No. 4. The puma, or American lion (*Felis concolor* of Linnaeus). By Frederick W. True. Pp. 591-608, 1 pl.

No. 5. Animals recently extinct or threatened with extermination, as represented in the collections of the U. S. National Museum. By Frederic A. Lucas. Pp. 609-649, 2 figs., 7 maps, 10 pls.

No. 6. The development of the American rail and track, as illustrated by the collection in the U. S. National Museum. By J. Elfreth Watkins. Pp. 651-708, 115 figs.

No. 7. Explorations in Newfoundland and Labrador in 1887, made in connection with the cruise of the U. S. Fish Commission schooner *Grampus*. By Frederic A. Lucas. Pp. 709-728, 1 pl.

No. 8. On a bronze Buddha in the U. S. National Museum. By Charles De Kay. Pp. 729-735, 1 pl.

Pt. 4. Bibliography of the Museum. Pp. 739-776.

Pt. 5. List of accessions. Pp. 779-843.

Appendix E. Preliminary handbook of the Department of Geology in the U. S. National Museum. Pp. 1-50.

Report of the United States National Museum for the year ending June 30, 1890.

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-116.

Pt. 2. Reports of the curators. Pp. 119-249.

Pt. 3. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. The humming birds. By Robert Ridgway. Pp. 253-383, 47 figs., 46 pls.

No. 2. White-line engraving for relief-printing in the 15th and 16th centuries. By S. R. Koehler. Pp. 385-394, 3 figs., 4 pls.

No. 3. The methods of fire-making. By Walter Hough. Pp. 395-409, 13 figs., 1 pl.

No. 4. The ulu, or woman's knife, of the Eskimo. By Otis T. Mason. Pp. 411-416, 21 pls.

No. 5. The ancient pit-dwellers of Yezo. By Romyn Hitchcock. Pp. 417-427, 4 figs., 8 pls.

No. 6. The Ainos of Yezo, Japan. By Romyn Hitchcock. Pp. 429-502, 21 figs., 37 pls.

No. 7. Handbook for the Department of Geology in the U. S. National Museum. Part 1. Geognosy: The materials of the earth's crust. By George P. Merrill. Pp. 503-591, 10 figs., 12 pls.

No. 8. The Catlin Collection of Indian paintings. By Washington Matthews. Pp. 593-610, 21 pls.

No. 9. The log of the *Savannah*. By J. Elfreth Watkins. Pp. 611-639, 6 pls.

No. 10. Anthropology at the Paris Exposition in 1889. By Thomas Wilson. Pp. 641-680, 7 pls.

Pt. 4. Bibliography of the Museum. Pp. 683-716.

Pt. 5. List of accessions. Pp. 719-788.

Report of the United States National Museum for the year ending June 30, 1891.

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-131.

Pt. 2. Reports of the curators. Pp. 135-270, 1 pl.

Pt. 3. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. The genesis of the National Museum. By G. Brown Goode. Pp. 273-380.

No. 2. Ethnological collections in the U. S. National Museum from Kilima-Njaro, East Africa. By W. L. Abbott. Pp. 381-428, 24 figs.

No. 3. The Bernadou, Allen, and Jouy Korean Collections, in the U. S. National Museum. By Walter Hough. Pp. 429-488, 31 pls.

No. 4. Shinto, or the mythology of the Japanese. By Romyn Hitchcock. Pp. 489-509.

No. 5. The ancient burial mounds of Japan. By Romyn Hitchcock. Pp. 511-523, 31 pls.

No. 6. Some ancient relics in Japan. By Romyn Hitchcock. Pp. 525-526, 4 pls.

No. 7. Prehistoric naval architecture of the North of Europe. By George H. Boehmer. Pp. 527-647, 127 figs., 17 pls.

No. 8. First draft of a system of classification for the World's Columbian Exposition. By G. Brown Goode. Pp. 649-735.

Pt. 4. Bibliography of the Museum. Pp. 739-764.

Pt. 5. List of accessions. Pp. 767-837.

Report of the United States National Museum for the year ending June 30, 1892.

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-97.

Pt. 2. Reports of the curators. Pp. 101-217, 3 pls.

Pt. 3. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. Japanese wood-cutting and wood-cut printing. Communicated by T. Tokuno, and edited by S. R. Koehler. Pp. 221-244, 5 figs., 10 pls.

No. 2. The relation of biology to geological investigation. By Charles A. White. Pp. 245-368, 1 pl.

No. 3. Scientific taxidermy for museums. Based on a study of the United States Government Collections. By R. W. Shufeldt. Pp. 369-436, 83 pls.

No. 4. The shofar—its use and origin. Pp. 437-450, 4 pls.

No. 5. The Crump burial cave. (Blount County, Alabama.) By Frank Burns. Pp. 451-454, 1 pl.

No. 6. Minute stone implements from India. By Thomas Wilson. Pp. 455-460, 2 pls.

No. 7. Comparative oölogy of North American birds. By R. W. Shufeldt. Pp. 461-493.

Pt. 4. Bibliography of the Museum. Pp. 497-526.

Pt. 5. List of accessions. Pp. 529-601.

Report of the United States National Museum for the year ending June 30, 1893.

Pt. 1. Report upon condition and progress of the Museum. By G. Brown Goode. Pp. 1-334, 59 pls.

Pt. 2. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. The poisonous snakes of North America. By Leonhard Stejneger. Pp. 339-487, 70 figs., 19 pls.

No. 2. Chinese games with dice and dominoes. By Stewart Culin. Pp. 491-537, 33 figs., 12 pls.

No. 3. The onyx marbles: Their origin, composition, and uses, both ancient and modern. By George P. Merrill. Pp. 541-585, 18 pls.

No. 4. The cowbirds. By Charles Bendire. Pp. 589-624, 3 pls.

No. 5. Primitive American armor. By Walter Hough. Pp. 627-651, 5 figs., 22 pls.

No. 6. The weapons and wings of birds. By Frederic A. Lucas. Pp. 655-663, 8 figs., 1 pl.

No. 7. Notes on the ethnology of Tibet. [Based on collections in the U. S. National Museum.] By William Woodville Rockhill. Pp. 669-747, 52 pls.

No. 8. Two Persepolitan casts in the U. S. National Museum. By Cyrus Adler. Pp. 751-753, 2 pls.

No. 9. Museum collections to illustrate religious history and ceremonials. By Cyrus Adler. Pp. 757-768.

No. 10. If public libraries, why not public museums? By Edward S. Morse. Pp. 771-780.

Report of the United States National Museum for the year ending June 30, 1894.

Pt. 1. Report on condition and progress of the Museum. By G. Brown Goode. Pp. 1-233.

Pt. 2. Papers describing and illustrating the collections in the U. S. National Museum.

No. 1. Primitive travel and transportation. By Otis Tufton Mason. Pp. 237-593, 260 figs., 25 pls.

No. 2. Mancala: The national game of Africa. By Stewart Culin. Pp. 595-607, 15 figs., 5 pls.

No. 3. The golden patera of Rennes. By Thomas Wilson. Pp. 609-617, 1 fig., 1 pl.

No. 4. The wooden statue of Baron Ii Kamon-no-Kami Naosuké, pioneer diplomat of Japan. Translated from the Japanese, by H. Satoh. Pp. 621-622, 1 pl.

No. 5. A study of the primitive methods of drilling. By J. D. McGuire. Pp. 623-756, 201 figs.

No. 6. The swastika. By Thomas Wilson. Pp. 757-1011, 374 figs., 25 pls.

Report of the United States National Museum for the year ending June 30, 1895.

Pt. 1. Report on condition and progress of the Museum. By G. Brown Goode. Pp. 1-308.

Pt. 2. Papers describing and illustrating collections in the U. S. National Museum.

No. 1. The social organization and the secret societies of the Kwakiutl Indians. By Franz Boas. Pp. 309-738, 215 figs., 51 pls.

No. 2. The graphic art of the Eskimos. By Walter James Hoffman. Pp. 739-968, 154 figs., 82 pls.

No. 3. Notes on the geology and natural history of the Peninsula of Lower California. By George P. Merrill. Pp. 969-994, 10 pls.

No. 4. The mineralogical collections in the U. S. National Museum. By Wirt Tassin. Pp. 995-1000, 1 pl.

No. 5. The tongues of birds. By Frederic A. Lucas. Pp. 1001-1020, 13 figs., 2 pls.

No. 6. The Ontonagon copper bowlder in the U. S. National Museum. By Charles Moore. Pp. 1021-1030, 2 pls.

No. 7. Taxidermical methods in the Leyden Museum, Holland. By R. W. Shufeldt. Pp. 1031-1037, 6 pls.

No. 8. The antiquity of the Red Race in America. By Thomas Wilson. Pp. 1039-1045.

Report of the United States National Museum for the year ending June 30, 1896.

Pt. 1. Report on condition and progress of the Museum. By G. Brown Goode. Pp. 1-284, 4 pls.

Pt. 2. Papers describing and illustrating collections in the U. S. National Museum.

No. 1. An account of the United States National Museum. By Frederick W. True. Pp. 287-324.

No. 2. Prehistoric art; or, the origin of art as manifested in the works of prehistoric man. By Thomas Wilson. Pp. 325-664, 325 figs., 74 pls., frontispiece.

No. 3. Chess and playing-cards. Catalogue of games and implements for divination exhibited by the United States National Museum in connection with the Department of Archaeology and Paleontology of the University of Pennsylvania at the Cotton States and International Exposition, Atlanta, Georgia, 1895. By Stewart Culin. Pp. 665-942, 226 figs., 50 pls.

No. 4. Biblical antiquities. A description of the exhibit at the Cotton States International Exposition, Atlanta, 1895. By Cyrus Adler and I. M. Casanowicz. Pp. 943-1023, 46 pls.

No. 5. The lamp of the Eskimo. By Walter Hough. Pp. 1025-1057, 4 figs., 24 pls.

Report of the United States National Museum for the year ending June 30, 1897. Vol. 1.

Pt. 1. Report on condition and progress of the Museum. By Charles D. Walcott. Pp. 1-245.

Pt. 2. Papers describing and illustrating collections in the U. S. National Museum.

No. 1. Recent Foraminifera. A descriptive catalogue of specimens dredged by the U. S. Fish Commission steamer *Albatross*. By James M. Flint. Pp. 249-349, 80 pls.

No. 2. Pipes and smoking customs of the American aborigines, based on material in the U. S. National Museum. By Joseph D. McGuire. Pp. 351-645, 239 figs., 4 pls.

No. 3. Catalogue of the series illustrating the properties of minerals. By Wirt Tassin. Pp. 647-688.

No. 4. Te Pito Te Henua, known as Rapa Nui; commonly called Easter Island, South Pacific Ocean. Latitude 27° 10′ S., Longitude 109° 26′ W. By George H. Cooke. Pp. 689-723.

No. 5. The man's knife among the North American Indians. By Otis Tufton Mason. Pp. 725-745, 17 figs.

No. 6. Classification of the mineral collections in the U. S. National Museum. By Wirt Tassin. Pp. 747-810.

No. 7. Arrowpoints, spearheads, and knives of prehistoric times. By Thomas Wilson. Pp. 811-988, 201 figs., 65 pls.

Report of the United States National Museum for the year ending June 30, 1897. Vol. 2. A memorial of George Brown Goode, together with a selection of his papers on museums and on the history of science in America.

Memorial Meeting.

Invitation. P. 3.

Programme. P. 4.

Introductory remarks. By Gardiner Greene Hubbard. Pp. 5-6.

Opening address. By Samuel Pierpont Langley. Pp. 7-11.

Goode as a historian and citizen. By William Lyne Wilson. Pp. 13-16.

Goode as a naturalist. By Henry Fairfield Osborn. Pp. 17-24.

Goode's activities in relation to American science. By William Healey Dall. Pp. 24-31.

Resolutions and messages of sympathy. Pp. 33-38.

Memoir of George Brown Goode. By Samuel Pierpont Langley. Pp. 39-61.
Papers by George Brown Goode. Pp. 63-477, 103 pls.
Museum-history and museums of history. Pp. 63-81.
The genesis of the United States National Museum. Pp. 83-191.
The principles of museum administration. Pp. 193-240.
The museums of the future. Pp. 241-262.
The origin of the national scientific and educational institutions of the United States. Pp. 263-354.
The beginnings of natural history in America. Pp. 355-406.
The beginnings of American science: The third century. Pp. 407-466.
The first national scientific congress (Washington, April, 1844), and its connection with the organization of the American Association. Pp. 467-477.
The published writings of George Brown Goode. By Randolph Iltyd Geare. Pp. 481-500, 6 pls.

Report of the United States National Museum for the year ending June 30, 1898.
Pt. 1. Report on condition and progress of the Museum. By Charles D. Walcott. Pp. 1-149.
Pt. 2. The crocodilians, lizards, and snakes of North America. By Edward Drinker Cope. Pp. 153-1270, 347 figs., 36 pls.

Report of the United States National Museum for the year ending June 30, 1899.
Pt. 1. Report on condition and progress of the Museum. By Richard Rathbun. Pp. 1-152.
Pt. 2. Papers describing and illustrating collections in the U. S. National Museum.
No. 1. Guide to the study of the collections in the section of applied geology: The nonmetallic minerals. By George P. Merrill. Pp. 155-483, 12 figs., 30 pls.
No. 2. A primitive frame for weaving narrow fabrics. By Otis Tufton Mason. Pp. 485-510, 19 figs., 9 pls.
No. 3. An early West Virginia pottery. By Walter Hough. Pp. 511-521, 18 pls.
No. 4. Pointed bark canoes of the Kutenai and Amur. By Otis T. Mason. Pp. 523-537, 6 figs., 5 pls.
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Report of the United States National Museum for 1933. (Part 2 of the Report of the Secretary of the Smithsonian Institution for the year ended June 30, 1933). By Alexander Wetmore. Pp. 1-194.

Report on the progress and condition of the United States National Museum for the year ended June 30, 1934. By Alexander Wetmore. Pp. 1-109.

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Report on the progress and condition of the United States National Museum for the year ended June 30, 1938. By Alexander Wetmore. Pp. 1-121.
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Report on the progress and condition of the United States National Museum for the year ended June 30, 1946. By Alexander Wetmore. Pp. 1-113.

BULLETINS

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1. Check-list of North American Batrachia and Reptilia; with a systematic list of the higher groups, and an essay on geographical distribution. Based on the specimens contained in the U. S. National Museum. By Edward D. Cope. Pp. 1-104. 1875.
2. Contributions to the natural history of Kerguelen Island, made in connection with the American [United States] Transit-of-Venus Expedition, 1874-75. By J. H. Kidder. I. Ornithology: Edited by Elliott Coues. Pp. i-ix and 1-51. 1875.
3. Contributions to the natural history of Kerguelen Island, made in connection with the United States Transit-of-Venus Expedition, 1874-75. By J. H. Kidder. II. Pp. 1-122. 1876.
   Oology, etc. By J. H. Kidder and Elliott Coues, pp. 7-20.
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   A study of *Chionis minor* with reference to its structure and systematic position. By J. H. Kidder and Elliott Coues, pp. 85-116.
4. Birds of southwestern Mexico. Collected by Francis E. Sumichrast for the United States National Museum. By George N. Lawrence. Pp. 1-56. 1875.
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6. Classification of the collection to illustrate the animal resources of the United States. A list of substances derived from the animal kingdom, with synopsis of the useful and injurious animals and a classification of the methods of capture and utilization. [International Exhibition, 1876.] By G. Brown Goode. Pp. i-xiii and 1-126. 1876.
7. Contributions to the natural history of the Hawaiian and Fanning Islands and Lower California, made in connection with the United States North Pacific Surveying Expedition. 1873-75. By Thomas H. Streets. Pp. 1-172. 1877.

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10. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. II. A.—Notes on Cottidae, Etheostomatidae, Percidae, Centrarchidae, Aphododeridae, Dorysomatidae, and Cyprinidae, with revisions of the genera and descriptions of new or little known species. B.—Synopsis of the Siluridae of the fresh waters of North America. By David S. Jordan. Pp. 1-120, 45 pls. 1877.
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12. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. III. A.—On the distribution of the fishes of the Alleghany region of South Carolina, Georgia, and Tennessee, with descriptions of new or little known species. By David S. Jordan and Alembert W. Brayton. B.—A synopsis of the family Catostomidae. By David S. Jordan. Pp. 1-237. 1878.
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14. Catalogue of the collection to illustrate the animal resources and the fisheries of the United States, exhibited at Philadelphia in 1876 by the Smithsonian Institution and the United States Fish Commission, and forming a part of the United States National Museum. [International Exhibition, 1876.] Prepared under the direction of G. Brown Goode. Pp. i-xvi and 1-351. 1879.
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      Section B. Means of pursuit and capture. Pp. 71-167.
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    - Pt. [2]. Catalogue of illustrations of the economical invertebrates of the American coasts. By W. H. Dall. Pp. 249-271.
    - Pt. [3]. Commercial statistics of animal products in the United States: A review of a portion of the report of the Chief of the Bureau of Statistics for the fiscal year ending June 30, 1877. By G. Brown Goode. Pp. 272-300.
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    - Fishes collected in Cumberland Gulf and Disko Bay. By Tarleton H. Bean. Pp. 107-138.
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    - Mollusks. List of shells obtained by Mr. Ludwig Kumlien, naturalist to the Howgate Expedition, 1877-78, at points in Cumberland Sound, Arctic region, west from Baffin's Bay. By W. H. Dall. Pp. 145-146.
    - Molluscoids. By A. E. Verrill. Pp. 147-150.
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Insects: Hymenoptera, Nocturnal Lepidoptera, Diptera, Coleoptera, Neuroptera, and Arachnida. By S. H. Scudder and others. Pp. 159-161. (Hymenoptera, E. T. Cresson; Lepidoptera, A. R. Grote; Diptera, E. Burgess; Coleoptera, J. L. LeConte; Neuroptera, H. Hagen; Arachnida, J. H. Emerton.)

Plants. List of the plants collected at points in Cumberland Sound between the Sixty-sixth and Sixty-seventh Parallels of North Latitude and on the south shores of Disko Island, Greenland. By Asa Gray. Pp. 163-166.

Lichens. List of lichens collected in the vicinity of Annanactook Harbor, Cumberland Sound, at about lat. 67° N., long. 68° 49′ W. By Edward Tuckerman. Pp. 167-168.

Algae. By W. G. Farlow. Pp. 169.

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16. Synopsis of the fishes of North America. By David S. Jordan and Charles H. Gilbert. Pp. i-lvi, 1-1018. 1882.

17. On the zoological position of Texas. By Edward D. Cope. Pp. 1-51. 1880.

18. Exhibit of the fisheries and fish culture of the United States of America, at the Internationale Fischerei-Ausstellung, held at Berlin, April 20, 1880, and forming a part of the collections of the National Museum, made by the United States Fish Commission. Prepared under the direction of G. Brown Goode. Pp. i-xv, 1-263. 1880.

19. Nomenclator Zoologicus. An alphabetical list of all generic names that have been employed by naturalists for recent and fossil animals from the earliest times to the close of the year 1879. In 2 parts: I. Supplemental list. II. Universal index. By Samuel H. Scudder. Pp. i-xxi, 1-376, 1-340. 1882.

20. Bibliographies of American naturalists. I. The published writing of Spencer Fullerton Baird, 1843-1882. By George Brown Goode. Pp. 1-xvi, 1-377. 1883.

21. Nomenclature of North American birds chiefly contained in the United States National Museum. By Robert Ridgway. Pp. 1-94. 1881.

22. Guide to the flora of Washington and vicinity. By Lester F. Ward. Pp. 1-264, 1 map. 1881.

23. Bibliographies of American naturalists. II. The published wrtings of Isaac Lea, LL.D. By Newton Pratt Scudder. Pp. i-lix, 1-278, 1 pl. 1885.

24. Check list of North American Reptilia and Batrachia, with catalogue of specimens in U. S. National Museum. By H. C. Yarrow. Pp. i-v, 1-249. 1882.

25. Contributions to the natural history of the Bermudas. Edited by J. Matthew Jones and George Brown Goode. Pp. i-xxiii, 1-353, 12 pls. 1884.

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26. Avifauna Columbiana: being a list of birds ascertained to inhabit the District of Columbia, with the times of arrival and departure of such as non-residents, and brief notices of habits, etc. The second edition, revised to date, and entirely rewritten. By Elliott Coues and D. Webster Prentiss. Pp. 1-133, 100 figs., 2 pls. 1883.

27. Descriptive catalogues of the collections sent from the United States to the International Fisheries Exhibition, London, 1883, constituting a report upon the American section. Prepared under the direction of G. Brown Goode. Pp. i-liv, 1-1279. 1884.

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28. A manual of American land shells. By W. G. Binney. Pp. 1-528, 516 figs. 1885.

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30. Bibliographies of American naturalists. III. Bibliography of publications relating to the collection of fossil invertebrates in the United States National Museum, including complete lists of the writings of Fielding B. Meek, Charles A. White, and Charles D. Walcott. By John Belknap Marcou. Pp. 1-333. 1885.

31. Synopsis of the North American Syrphidae. By Samuel W. Williamson. Pp. i-xxx, 1-335, 12 pls. 1886.

32. Catalogue of batrachians and reptiles of Central America and Mexico. By E. D. Cope. Pp. 1-98. 1887.

33. Catalogue of minerals and synonyms. By T. Egleston. Pp. 1-198. 1887.

34. The Batrachia of North America. By E. D. Cope. Pp. 1-525, 119 figs., 86 pls. 1889.

35. Bibliographical catalogue of the described transformations of North American Lepidoptera. By Henry Edwards. Pp. 1-147. 1889.

36. Contributions to the natural history of the cetaceans. A review of the family Delphinidae. By Frederick W. True. Pp. 1-181, 47 pls. 1889.

37. A preliminary catalogue of the shell-bearing marine mollusks and brachiopods of the southeastern coast of the United States, with illustrations of many of the species. By William Healey Dall. Pp. 1-221, 74 pls. 1889. (New ed., 1903, included 21 additional pls.)

38. Contribution toward a monograph of the insects of the lepidopterous family Noctuidae of temperate North America. Revision of the species of the genus *Agrotis*. By John B. Smith. Pp. i-iv, 1-237, 5 pls. 1890.

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Pt. F. Directions for collecting and preserving insects. By C. V. Riley. Pp. 1-147, 139 figs., 1 pl. 1892.

Pt. G. Instructions for collecting mollusks, and other useful hints for the conchologist. By William H. Dall. Pp. 1-56, 8 figs. 1892.

Pt. H. Directions for collecting minerals. By Wirt Tassin. Pp. 1-6, 8 figs. 1895.

Pt. I. Directions for collecting rocks and for the preparation of thin sections. By George P. Merrill. Pp. 1-15, 17 figs. 1895.

Pt. J. Directions for collecting specimens and information illustrating the aboriginal uses of plants. By Frederick V. Coville. Pp. 1-8. 1895.

Pt. K. Directions for collecting and preparing fossils. By Charles Schuchert. Pp. 1-31, 13 figs. 1895.

Pt. L. Directions for collecting and preserving scale insects (Coccidae). By T. D. A. Cockerell. Pp. 1-9. 1897.

Pt. M. The methods employed at the Naples Zoological Station for the preservation of marine animals. By Salvatore Lo Bianco. Translated from the original Italian by Edmund Otis Hovey. Pp. 1-42, 1 pl. 1899.

Pt. N. Directions for preparing study specimens of small mammals. By Gerrit S. Miller, Jr. Pp. 1-10, 1 fig. 1899. (2d ed., rev., with abstracts in German, French, and Spanish, issued in 1901; 3d ed., under new title, "Directions for Preparing Specimens of Mammals," and with additional figures, 1912; 4th ed., 1914; 5th ed., 1925; 6th ed., 1932.)

Pt. O. Directions for collecting and rearing dragon flies, stone flies, and may flies. By James G. Needham. Pp. 1-9, 4 figs. 1899.

Pt. P. Directions for collectors of American basketry. By Otis T. Mason. Pp. 1-31, 44 figs. 1902.

Pt. Q. Instructions to collectors of historical and anthropological specimens. By William Henry Holmes and Otis Tufton Mason. Pp. 1-16. 1902.

Pt. R. Directions for collecting information and specimens for physical anthropology. By Aleš Hrdlička. Pp. 1-25, 8 pls. 1904.

Pt. S. Directions for collecting information and objects illustrating the history of medicine. By James M. Flint. Pp. 1-5. 1905.

40. Bibliographies of American naturalists. IV. The published writings of George Newbold Lawrence, 1844-1891. By L. S. Foster. Pp. i-xi, 1-124, 1 pl. 1892.

41. Bibliographies of American naturalists. V. The published writings of Dr. Charles Girard. By George Brown Goode. Pp. i-vi, 1-141, 1 pl. 1891.

42. A preliminary descriptive catalogue of the systematic collections in economic geology and metallurgy in the United States National Museum. By Frederic P. Dewey. Pp. i-xviii, 1-256, 10 figs., 34 pls. 1891.

43. A monograph of the bats of North America. By Harrison Allen. Pp. i-ix, 1-198, 1 fig., 38 pls. 1893.

44. A catalogue, bibliographical and synonymical, of the species of moths of the lepidopterous superfamily Noctuidae, found in boreal America, with critical notes. By John B. Smith. Pp. 1-424. 1893.

45. A monograph of the North American Proctotrypidae. By William H. Ashmead. Pp. 1-472, 2 figs., 18 pls. 1893.

46. The Myriapoda of North America. By Charles Harvey Bollman. Edited by L. M. Underwood. Pp. 1-210. 1893.

47. The fishes of North and Middle America: A descriptive catalogue of the species of fish-like vertebrates found in the waters of North America, north of the Isthmus of Panama. By David Starr Jordan and Barton Warren Evermann. Pp. 1-3313, 392 pls.
    Pt. 1. Pp. i-lx, 1-1240. 1896.
    Pt. 2. Pp. i-xxx, 1241-2183. 1898.
    Pt. 3. Pp. i-xxiv, 2183a-3136. 1898.
    Pt. 4. Pp. i-ci, 3137-3313, 392 pls. 1900.

48. Contributions toward a monograph of the insects of the lepidopterous family Noctuidae of boreal North America. A revision of the deltoid moths. By John B. Smith. Pp. i-vi, 1-129, 14 pls. 1895.

49. The published writings of Philip Lutley Sclater, 1844-1896. Prepared under the direction of G. Brown Goode. Pp. i-xix, 1-135, 1 pl. 1896.

50. The birds of North and Middle America: A descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the Isthmus of Panama, the West Indies and other islands of the Caribbean Sea, and the Galapagos Archipelago.
    Pt. 1. Family Fringillidae—The Finches. By Robert Ridgway. Pp. i-xxx, 1-715, 20 pls. 1901.
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    Pt. 9. Families Gruidae, Rallidae, Heliornithidae, Eurypygidae. By Robert Ridgway and Herbert Friedmann. Pp. i-ix, 1-254, 16 figs. Oct. 2, 1941.
    Pt. 10. Families Cracidae, Tetraonidae, Phasianidae, Numididae, Meleagrididae. By Robert Ridgway and Herbert Friedmann. Pp. i-xii, 1-484, 28 figs. Dec. 18, 1946.

51. A list of the publications of the United States National Museum (1875-1900). By Randolph I. Geare. Pp. i-vi, 1-168. 1902. (Suppl. 1, pp. 1-40, covering period 1901-1906, issued in 1906.)

52. A list of North American Lepidoptera and key to the literature of this order of insects. By Harrison G. Dyar, assisted by C. H. Fernald, George D. Hulst, and August Busck. Pp. i-xix, 1-723. 1902.

53. Catalogue of the type and figured specimens of fossils, minerals, rocks and ores in the Department of Geology, United States National Museum. Prepared under the direction of George P. Merrill.

Pt. 1. Fossil invertebrates. Section 1. Catalogue of the type specimens of fossil invertebrates in the Department of Geology, United States National Museum. By Charles Schuchert, assisted by W. H. Dall, T. W. Stanton, and R. S. Bassler. Pp. i-v, 1-704. 1905.

Pt. 2. Fossil vertebrates; fossil plants; minerals, rocks, and ores. Section 2. Catalogue of the types, cotypes, and figured specimens of fossil vertebrates in the Department of Geology, United States National Museum. Begun by F. A. Lucas, completed by J. W. Gidley and C. W. Gilmore, assisted by Mrs. M. S. F. Jouy and Miss M. W. Moodey. Pp. 1-82. 1907. Section 3. Catalogue of the types and illustrated specimens of fossil plants in the Department of Geology, United States National Museum. By A. C. Peale, with cooperation of David White and F. H. Knowlton, assisted by Mrs. M. S. F. Jouy, Miss L. M. Graves, and Miss M. W. Moodey. Pp. 85-350. 1907. Section 4. List of minerals, meteorites, rocks, and ores that have been the subject of special investigation and publication, and are now in the Department of Geology, U. S. National Museum. By George P. Merrill and Wirt Tassin. Pp. 351-370. 1907.

54. A monograph on the isopods of North America. By Harriet Richardson. Pp. i-liii, 1-727, 740 figs. 1905.

55. A contribution to the oceanography of the Pacific. Compiled from data collected by the United States steamer *Nero* while engaged in the survey of a route for a trans-Pacific cable. By James M. Flint. Pp. i-v, 1-62, 14 pls. 1905.

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Pt. 8. Rotaliidae, Amphisteginidae, Calcarinidae, Cymbaloporettidae, Globorotaliidae, Anomalinidae, Planorbulinidae, Rupertiidae, and Homotremidae. Pp. i-ix, 1-179, 26 pls. July 25, 1931.

105. Catalogue of the postage stamps and stamped envelopes of the United States and possessions, issued prior to January 1, 1919. Compiled by Joseph B. Leavy. Pp. i-ix, 1-204, 3 pls. May 7, 1919.

106. North American Early Tertiary Bryozoa. By Ferdinand Canu and Ray S. Bassler. Pp. i-xx, 1-879, 279 figs., 162 pls. (Text and plates in separate vols.) June 30, 1920.

107. Life histories of North American diving birds: Order Pygopodes. By Arthur Cleveland Bent. Pp. i-xiii, 1-245, 55 pls. Aug. 1, 1919.

108. A revision of the Nearctic termites. By Nathan Banks. With notes on biology and geographic distribution by Thomas E. Snyder. Pp. i-viii, 1-228, 70 figs., 35 pls. Apr. 13, 1920.
109. Contributions to a history of American State geological and natural history surveys. Edited and compiled by George P. Merrill. Pp. i-xviii, 1-549, 37 pls. Aug. 2, 1920.
110. Osteology of the carnivorous Dinosauria in the United States National Museum, with special reference to the genera *Antrodemus* (*Allosaurus*) and *Ceratosaurus*. By Charles Whitney Gilmore. Pp. i-xi, 1-159, 79 figs., 36 pls. Sept. 9, 1920.
111. A monograph of the East American scaphopod mollusks. By John B. Henderson. Pp. i-vi, 1-177, 20 pls. Oct. 6, 1920.
112. Summary of the marine shellbearing mollusks of the northwest coast of America, from San Diego, California, to the Polar Sea, mostly contained in the collection of the United States National Museum, with illustrations of hitherto unfigured species. By William Healey Dall. Pp. i-iii, 1-217, 22 pls. Feb. 24, 1921.
113. Life histories of North American gulls and terns: Order Longipennes. By Arthur Cleveland Bent. Pp. i-x, 1-345, 93 pls. Aug. 27, 1921.
114. A revision of the king snakes: Genus *Lampropeltis*. By Frank N. Blanchard. Pp. i-vi, 1-260, 78 figs. Sept. 15, 1921.
115. The fossil crinoid genus *Dolatocrinus* and its allies. By Frank Springer. Pp. i-v, 1-78, 6 figs., 16 pls. Apr. 6, 1921.
116. The dipterous genus *Dolichopus* Latreille in North America. By M. C. Van Duzee, F. R. Cole, and J. M. Aldrich. Pp. i-vi, 1-304, 16 pls. Mar. 21, 1921.
117. The distribution of bird life in the Urubamba Valley of Peru. A report on the birds collected by the Yale University-National Geographic Society's Expeditions. By Frank M. Chapman. Pp. 1-138, 3 figs., 9 pls. June 29, 1921.
118. Handbook and descriptive catalogue of the collections of gems and precious stones in the United States National Museum. By George P. Merrill, assisted by Margaret W. Moodey and Edgar T. Wherry. Pp. i-viii, 1-225, 26 figs., 14 pls. Apr. 26, 1922.
119. Catalogue of the mechanical engineering collection in the United States National Museum. Motors, locomotives, and self-propelled vehicles. Edited and compiled by Carl W. Mitman. Pp. 1-118, 59 figs., 2 pls. Feb. 3, 1922.
120. The opalinid ciliate infusorians. By Maynard M. Metcalf. Pp. i-vii, 1-484, 258 figs. June 9, 1923.
121. Life histories of North American petrels and pelicans and their allies: Order Tubinares and order Steganopodes. By Arthur Cleveland Bent. Pp. i-xii, 1-343, 69 pls. Oct. 19, 1922.
122. A monograph of the American shipworms. By Paul Bartsch. Pp. i-iii, 1-51, 1 fig., 37 pls. Aug. 4, 1922.
123. Revision of the North American moths of the subfamily Eucosminae of the family Olethreutidae. By Carl Heinrich. Pp. i-iv, 1-298, 1 fig, 59 pls. Apr. 12, 1923.
124. The type species of the genera of Chalcidoidea or chalcid-flies. By A. B. Gahan and Margaret M. Fagan. Pp. i-iii, 1-173. Apr. 6, 1923.
125. North American Later Tertiary and Quaternary Bryozoa. By Ferdinand Canu and Ray S. Bassler. Pp. i-vii, 1-302, 38 figs., 47 pls. July 16, 1923.
126. Life histories of North American wild fowl: Order Anseres (Part). By Arthur Cleveland Bent. Pp. i-ix, 1-250, 46 pls. May 25, 1923.
127. Catalogue of the watercraft collection in the United States National Museum. Compiled and edited by Carl W. Mitman. Pp. i-v, 1-298, 96 figs., 1 pl. July 17, 1923.
128. List of North American Recent mammals, 1923. By Gerrit S. Miller, Jr. Pp. i-xvi, 1-673. Apr. 29, 1924.
129. The spider crabs of America. By Mary J. Rathbun. Pp. i-xx, 1-613, 153 figs., 283 pls. June 19, 1925.

130. Life histories of North American wild fowl: Order Anseres (Part). By Arthur Cleveland Bent. Pp. i-x, 1-376, 60 pls. June 27, 1925.
131. The minerals of Idaho. By Earl V. Shannon. Pp. i-vii, 1-483, 170 figs., 19 pls. Apr. 9, 1926.
132. Revision of the North American moths of the subfamilies Laspeyresiinae and Olethreutinae. By Carl Heinrich. Pp. i-v, 1-216, 2 figs., 76 pls. Feb. 2, 1926.
133. Observations on the birds of Argentina, Paraguay, Uruguay, and Chile. By Alexander Wetmore. Pp. i-iv, 1-448, 20 pls. Feb. 1, 1926.
134. Material culture of the people of southeastern Panama, based on specimens in the United States National Museum. By Herbert W. Krieger. Pp. i-v, 1-141, 1 fig., 37 pls. Nov. 4, 1926.
135. Life histories of North American marsh birds. Orders Odontoglossae, Herodiones, and Paludicolae. By Arthur Cleveland Bent. Pp. i-xii, 1-490, 98 pls. Mar. 11, 1927.
136. Handbook of the collection of musical instruments in the United States National Museum. By Frances Densmore. Pp. i-iii, 1-164, 48 pls. May 26, 1927.
137. The collection of primitive weapons and armor of the Philippine Islands in the United States National Museum. By Herbert W. Krieger. Pp. i-iii, 1-128, map, 21 pls. Dec. 1, 1926.
138. The fossil stalk-eyed Crustacea of the Pacific slope of North America. By Mary J. Rathbun. Pp. i-vii, 1-155, 6 figs., 39 pls. Dec. 30, 1926.
139. Fire as an agent in human culture. By Walter Hough. Pp. i-xiv, 1-270, 4 figs., 41 pls. Dec. 30, 1926.
140. Bird parasites of the nematode suborders Strongylata, Ascaridata, and Spirurata. By Eloise B. Cram. Pp. i-xvii, 1-465, 444 figs. June 30, 1927.
141. Collection of heating and lighting utensils in the United States National Museum. By Walter Hough. Pp. i-viii, 1-113, 99 pls. Feb. 17, 1928.
142. Life histories of North American shore birds. Order Limicolae (Part 1). By Arthur Cleveland Bent. Pp. i-ix, 1-420, 55 pls. Dec. 31, 1927.
143. Biological and taxonomic investigations on the mutillid wasps. By Clarence E. Mickel. Pp. i-ix, 1-351, 28 figs., 5 pls. Apr. 23, 1928.
144. The American bats of the genera *Myotis* and *Pizonyx*. By Gerrit S. Miller, Jr., and Glover M. Allen. Pp. i-viii, 1-218, 13 maps. May 25, 1928.
145. A revision of the North American species of buprestid beetles belonging to the genus *Agrilus*. By W. S. Fisher. Pp. i-v, 1-347, 11 pls. Dec. 21, 1928.
146. Life histories of North American shore birds. Order Limicolae (Part 2). By Arthur Cleveland Bent. Pp. i-ix, 1-412, 66 pls. Mar. 27, 1929.
147. Archeological and historical investigations in Samaná, Dominican Republic. By Herbert W. Krieger. Pp. i-iv, 1-91, 1 map, 27 pls. Sept. 9, 1929.
148. Collections of objects of religious ceremonial in the United States National Museum. By Immanuel Moses Casanowicz. Pp. i-viii, 1-207, 75 pls. Dec. 31, 1929.
149. Composition and structure of meteorites. By George P. Merrill. Pp. i-vi, 1-62, 32 pls. Feb. 26, 1930.
150. Revision of the fishes of the family Liparidae. By Victor Burke. Pp. i-xii, 1-204, 110 figs. May 27, 1930.
151. East African reptiles and amphibians in the United States National Museum. By Arthur Loveridge. Pp. i-v, 1-135, 1 pl. Dec. 31, 1929.
152. The cancroid crabs of America of the families Euryalidae, Portunidae, Atelecyclidae, Cancridae, and Xanthidae. By Mary J. Rathbun. Pp. i-xvi, 1-609, 85 figs., 230 pls. May 29, 1930.
153. Birds collected by the Childs Frick Expedition to Ethiopia and Kenya Colony. By Herbert Friedmann.
    Pt. 1. Non-Passeres. Pp. i-xiii, 1-516, 22 figs., 12 pls. June 10, 1930.
    Pt. 2. Passeres. Pp. i-xii, 1-506, 30 figs., 14 pls. June 23, 1937.
154. A study of the teiid lizards of the genus *Cnemidophorus*, with special reference to their phylogenetic relationships. By Charles E. Burt. Pp. i-viii, 1-286, 38 figs. Apr. 24, 1931.

155. The birds of Haiti and the Dominican Republic. By Alexander Wetmore and Bradshaw H. Swales. Pp. i-iv, 1-483, 26 pls. Mar. 7, 1931.
156. Aboriginal Indian pottery of the Dominican Republic. By Herbert W. Krieger. Pp. i-iii, 1-165, 56 pls. Dec. 31, 1931.
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161. The Foraminifera of the tropical Pacific collections of the *Albatross,* 1899-1900. By Joseph Augustine Cushman.
    Pt. 1. Astrorhizidae to Trochamminidae. Pp. i-iv, 1-88, 1 fig., 17 pls. June 18, 1932.
    Pt. 2. Lagenidae to Alveolinellidae. Pp. i-vi, 1-79, 19 pls. Aug. 23, 1933.
    Pt. 3. Heterohelicidae and Buliminidae. Pp. i-v, 1-67, 15 pls. Feb. 10, 1942.
162. Life histories of North American gallinaceous birds (orders Galliformes and Columbiformes). By Arthur Cleveland Bent. Pp. i-xi, 1-490, 93 pls. May 25, 1932.
163. American and European swords in the historical collections of the United States National Museum. By Theodore T. Belote. Pp. i-vii, 1-163, 46 pls. July 1, 1932.
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166. The oxystomatous and allied crabs of America. By Mary J. Rathbun. Pp. i-vi, 1-278, 47 figs., 86 pls. Oct. 14, 1937.
167. Life histories of North American birds of prey. Part 1. Order Falconiformes. By Arthur Cleveland Bent. Pp. i-viii, 1-409, 102 pls. May 3, 1937.
168. Nearctic Collembola, or springtails, of the family Isotomidae. By J. W. Folsom. Pp. i-iii, 1-144, 39 pls. July 1, 1937.
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170. Life histories of North American birds of prey. Part 2. Orders Falconiformes and Strigiformes. By Arthur Cleveland Bent. Pp. i-viii, 1-482, 92 pls. Aug. 8, 1938.
171. The Pleistocene vertebrate fauna from Cumberland Cave, Maryland. By James W. Gidley and C. Lewis Gazin. Pp. i-vi, 1-99, 50 figs., 10 pls. May 5, 1938.
172. Birds from Siam and the Malay Peninsula in the United States National Museum collected by Drs. Hugh M. Smith and William L. Abbott. By J. H. Riley. Pp. i-iv, 1-581. Dec. 3, 1938.
173. Catalog of the mechanical collections of the Division of Engineering, United States National Museum. By Frank A. Taylor. Pp. i-viii, 1-203, 37 pls. Mar. 2, 1939.
174. Life histories of North American wookpeckers. Order Piciformes. By Arthur Cleveland Bent. Pp. i-viii, 1-334, 39 pls. May 23, 1939.
175. Variations and relationships in the snakes of the genus *Pituophis.* By Olive Griffith Stull. Pp. i-vi, 1-225, 84 figs. June 26, 1940.
176. Life histories of North American cuckoos, goatsuckers, hummingbirds, and their allies. Orders Psittaciformes, Cuculiformes, Trogoniformes, Coraciiformes, Caprimulgiformes, and Micropodiiformes. By Arthur Cleveland Bent. Pp. i-viii, 1-506, 73 pls. July 20, 1940.
177. The herpetology of Hispaniola. By Doris M. Cochran. Pp. i-vii, 1-398, 120 figs., 12 pls. July 8, 1941.

178. Catalog of the type specimens of mammals in the United States National Museum, including the Biological Surveys collection. By Arthur J. Poole and Viola S. Schantz. Pp. i-xiii, 1-705. Apr. 8, 1942.

179. Life histories of North American flycatchers, larks, swallows, and their allies. Order Passeriformes (Families Cotingidae, Tyrannidae, Alaudidae, and Hirundinidae). By Arthur Cleveland Bent. Pp. i-xi, 1-555, 70 pls. May 8, 1942.

180. Fishes of the Phoenix and Samoan Islands collected in 1939 during the expedition of the U.S.S. *Bushnell*. By Leonard P. Schultz. Pp. i-x, 1-316, 27 figs., 9 pls. Jan. 20, 1943.

181. The cyclophorid operculate land mollusks of America. By Carlos de la Torre, Paul Bartsch, and Joseph P. E. Morrison. Pp. i-iv, 1-306, 42 pls. Aug. 21, 1942.

182. Monograph of the West Indian beetles of the family Staphylinidae. By Richard E. Blackwelder. Pp. i-viii, 1-658, 3 figs., 19 maps. Jan. 27, 1943.

183. Archeological investigations in Platte and Clay Counties, Missouri. By Waldo R. Wedel. With Appendix, "Skeletal Remains from Platte and Clay Counties, Missouri," by T. Dale Stewart. Pp. i-viii, 1-284, 22 figs., 50 pls. Oct. 1, 1943.

184. The metallography of meteoric iron. By Stuart H. Perry. Pp. i-vii, 1-206, 9 figs., 78 pls. Feb. 15, 1944.

185. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder.
Pt. 1. Pp. i-xii, 1-188. Mar. 7, 1944.
Pt. 2. Pp. i-iii, 189-341. June 30, 1944.
Pt. 3. Pp. i-iv, 343-550. May 21, 1945.
Pt. 4. Pp. i-iii, 551-763. May 13, 1946.
[To be completed.]

186. The birds of northern Thailand. [An account of the birds of Chiang Rae Province and those parts of the provinces of the Mae Hong Son, Chiang Mai, Lamphun, Lampang, Phrae, and Nan lying north of latitude 17°47′ N.] By H. G. Deignan. Pp. i-v, 1-616, 4 maps, 9 pls. Sept. 17, 1945.

187. An annotated checklist and key to the snakes of Mexico. By Hobart M. Smith and Edward H. Taylor. Pp. i-iv, 1-239. Oct. 5, 1945.

188. The fresh-water fishes of Siam, or Thailand. By Hugh M. Smith. Pp. i-xi, 1-622, 107 figs., 9 pls. Nov. 13, 1945.

189. A descriptive catalog of the shore fishes of Peru. By Samuel F. Hildebrand. Pp. i-xi, 1-530, 95 figs. Feb. 26, 1946.

190. The North American clear-wing moths of the family Aegeriidae. By George P. Engelhardt. Pp. i-vi, 1-222, 32 pls. June 28, 1946.

191. Life histories of North American jays, crows, and titmice. Families Corvidae and Paridae. By Arthur Cleveland Bent. Pp. i-xi, 1-495, 68 pls.

192. The operculate land mollusks of the family Annulariidae of the island of Hispaniola and the Bahama Archipelago. By Paul Bartsch. Pp. i-iv, 1-264, 38 pls. Oct. 3, 1946.

193. A list of the publications of the United States National Museum (1875-1946). Compiled in the Editorial Division, Smithsonian Institution. Pp. 1-305.

CONTRIBUTIONS FROM THE U. S. NATIONAL HERBARIUM[3]

Volume 1

Reports on collections, and miscellaneous papers. Pp. i-viii (title page, note, prefatory note, contents, and list of illustrations); pp. 1-368 (papers 1-9); pp. 393-434 (index); 10 figs., 35 pls. 1890-1895.

No.

1. Plants from southern California. By George Vasey and J. N. Rose. Pp. 1-8. June 16, 1890.

   List of plants collected by Dr. Edward Palmer in Lower California in 1889. By George Vasey and J. N. Rose. Pp. 9-28. June 16, 1890.

2. Upon a collection of plants made by Mr. G. C. Nealley, in the region of the Rio Grande, in Texas, from Brazos Santiago to El Paso County. By John Coulter. Pp. 29-61. July 18, 1890.

3. List of plants collected by Dr. Edward Palmer in Lower California and western Mexico in 1890. By George Vasey and J. N. Rose. Pp. 63-90, 1 pl. Nov. 8, 1890.

4. List of plants collected by Dr. Edward Palmer in western Mexico and Arizona in 1890. By J. N. Rose. Pp. 91-116, 10 pls. June 30, 1891.

   List of plants collected by Dr. E. Palmer in Arizona in 1890. By J. N. Rose. Pp. 117-127. June 30, 1891.

5. List of plants collected by Dr. Edward Palmer in 1890 on Carmen Island. By J. N. Rose. Pp. 129-134, 3 pls. Sept. 20, 1892.

   List of plants collected by the U.S.S. *Albatross* in 1887-'91 along the western coast of America. 1. List of plants from Cocos Island. By J. N. Rose. P. 135. 2. List of plants from Galapagos Islands. By J. N. Rose. Pp. 136-138. 3. List of ferns from southern Patagonia. By Daniel C. Eaton. P. 138. 4. List of mosses from Fuegia and Patagonia. By Daniel C. Eaton. Pp. 138-139. 5. List of liverworts from southern Patagonia. By A. W. Evans. Pp. 140-142. 6. List of lichens from southern Patagonia. By J. W. Eckfeldt. P. 142. 2 pls. Sept. 20, 1892.

   Revision of the North American species of *Hoffmanseggia*. By E. M. Fisher. Pp. 143-150. Sept. 20, 1892.

   Systematic and alphabetic index of new species of North American phanerogams and pteridophytes, published in 1891. Compiled by Josephine A. Clark. Pp. 151-188. Sept. 20, 1892.

6. List of plants collected by C. S. Sheldon and M. A. Carleton in Indian Territory in 1891. By J. M. Holzinger. Pp. 189-219, 2 pls. Dec. 6, 1892.

   Observations on the native plants of Oklahoma Territory and adjacent districts. By M. A. Carleton. Pp. 220-232. Dec. 6, 1892.

7. Systematic and alphabetic index to new species of North American phanerogams and pteridophytes published in 1892. By Josephine A. Clark. Pp. 233-264. July 15, 1892.

8. Notes on some Pacific coast grasses. By George Vasey. Pp. 265-266. Oct. 31, 1893.

   Descriptions of new or noteworthy grasses from the United States. By George Vasey. Pp. 267-280. Oct. 31, 1893.

   Descriptions of new grasses from Mexico. By George Vasey. Pp. 281-285, 1 pl. Oct. 31, 1893.

   Descriptions of four new plants from Texas and Colorado. By J. M. Holzinger. Pp. 286-287, 2 pls. Oct. 31, 1893.

   List of plants new to Florida. By J. M. Holzinger. P. 288. Oct. 31, 1893.

   Descriptions of three new plants. By J. N. Rose. Pp. 289-290, 2 pls. Oct. 31, 1893.

   List of lichens from California and Mexico, collected by Dr. Edward Palmer from 1888 to 1892. By J. W. Eckfeldt. Pp. 291-292. Oct. 31, 1893.

9. Report on a collection of plants made in the states of Sonora and Colima, Mexico, by Dr. Edward Palmer, in the years 1890 and 1891. By J. N. Rose. Pp. 293-366, 10 figs., 13 pls. Jan. 31, 1895.

   Three new species of Sapindaceae from western Mexico and Lower California. By L. Radlkofer. Pp. 367-368. Jan. 31, 1895.

[3] Volumes 1-8 of the Contributions were published by the U. S. Department of Agriculture.

Volume 2

Botany of western Texas. Pp. i-v (title page, note, prefatory note, table of contents, and list of plates); pp. 1-568 (papers 1-3); pp. 569-588 (index); 3 pls. 1891-1894.

No.

1. Manual of the phanerogams and pteridophytes of western Texas: Polypetalae. By John M. Coulter. Pp. 1-152, 1 pl. June 27, 1891.
2. Manual of the phanerogams and pteridophytes of western Texas: Gamopetalae. By John M. Coulter. Pp. 153-345, 2 pls. July 1, 1892.
3. Manual of the phanerogams and pteridophytes of western Texas: Apetalae, Monocotyledonae, Pteridophyta. By John M. Coulter. Pp. 347-568. May 10, 1894.

Volume 3

Reports on collections, revisions of groups, and miscellaneous papers. Pp. i-vii (title page, note, errata and addenda, prefatory note, contents, and list of illustrations); pp. 1-578 (papers 1-9); 579-612 (index); 28 pls. 1892-1896.

No.

1. Monograph of the grasses of the United States and British America. By George Vasey. Pp. 1-89. Feb. 25, 1892.
2. Preliminary revision of the North American species of *Cactus, Anhalonium,* and *Lophophora.* By John M. Coulter. Pp. 91-132. June 10, 1894.
3. Flora of the sand hills of Nebraska. By P. A. Rydberg. Pp. 133-203, 1 fig., 2 pls. Sept. 14, 1895.
4. Report on a collection of plants made by J. H. Sandberg and assistants in northern Idaho in the year 1892. By John M. Holzinger. Pp. 205-287, 2 pls. Nov. 23, 1895.
5. Report on Mexican Umbelliferae, mostly from the state of Oaxaca, recently collected by C. G. Pringle and E. W. Nelson. By John M. Coulter and J. N. Rose. Pp. 289-309, 6 pls. Dec. 14, 1895.

   Descriptions of plants, mostly new, from Mexico and the United States. By J. N. Rose. Pp. 311-323, 6 pls. Dec. 14, 1895.
6. Botany of Yakutat Bay, Alaska. I.—Field report. By Frederick Funston. II.—Botanical report. By Frederick Vernon Coville. Pp. 325-353. Jan. 15, 1896.
7. Preliminary revision of the North American species of *Echinocactus, Cereus,* and *Opuntia.* By John M. Coulter. Pp. 355-462. Apr. 1, 1896.
8. Flora of the Back Hills of South Dakota. By P. A. Rydberg. Pp. 463-536, 4 pls. June 13, 1896.
9. Report on a collection of plants made by C. H. Thompson in southwestern Kansas in 1893. By A. S. Hitchcock. Pp. 537-557. Aug. 5, 1896.

   Crepis occidentalis and its allies. By Frederick V. Coville. Pp. 559-565, 6 pls. Aug. 6, 1896.

   Plants from the Big Horn Mountains of Wyoming. By J. N. Rose. Pp. 567-574. Aug. 5, 1896.

   Leibergia, a new genus of Umbelliferae from the Columbia River region. By John M. Coulter and J. N. Rose. Pp. 575-576, 1 pl. Aug. 5, 1896.

   Roseanthus, a new genus of Cucurbitaceae from Acapulco, Mexico. By Alfred Cogniaux. Pp. 577-578, 1 pl. Aug. 5, 1896.

Volume 4

Botany of the Death Valley Expedition. By Frederick Vernon Coville. Pp. i-viii (title page, note, letter of transmittal, letter of submittal, contents, and list of illustrations); 363 pp., 22 pls., 1 map. Nov. 29, 1893.

Volume 5

Systematic, economic, and ecological investigations. Pp. i-x (title page, note, prefatory note, contents, and illustrations); pp. 1-550 (papers 1-6); pp. 551-585 (index); 77 pls., 90 figs., 2 maps. 1897-1901.

No.

1. General report on a botanical survey of the Coeur d'Alene Mountains in Idaho during the summer of 1895. By John B. Leiberg. Pp. 1-86, 1 pl. Jan. 25, 1897.

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2. Notes on the plants used by the Klamath Indians of Oregon. By Frederick V. Coville. Pp. 87-108. June 9, 1897.
3. Studies of Mexican and Central American plants. By J. N. Rose. Pp. 109-144, 6 figs., 16 pls. Aug. 27, 1897.
4. Studies of Mexican and Central American Plants—No. 2. By J. N. Rose. (With a section on "Ferns Collected in Mexico by J. N. Rose during the Months of August and September, 1897," pp. 146-151, by George E. Davenport.) Pp. 145-200, 24 figs., 8 pls. Oct. 31, 1899.

   Two new species of plants from the northwestern United States. By L. F. Henderson. Pp. 201-202, 1 pl. Oct. 31, 1899.

   Hesperogenia, a new genus of Umbelliferae from Mount Rainier. By John M. Coulter and J. N. Rose. P. 203, 1 pl. Oct. 31, 1899.

   Three new species of *Tradescantia* from the United States. By J. N. Rose. Pp. 204-206. Oct. 31, 1899.

   Treleasea, a new genus of Commelinaceae. By J. N. Rose. Pp. 207-208. Oct. 31, 1899.

   Notes on useful plants of Mexico. By J. N. Rose. Pp. 209-259, 2 figs., 37 pls. Oct. 31, 1899.
5. The plant covering of Ocracoke Island; a study in the ecology of the North Carolina strand vegetation. By Thomas H. Kearney, Jr. Pp. 261-319, 18 figs. Aug. 1, 1900.
6. Report on a botanical survey of the Dismal Swamp region. By Thomas H. Kearney. Pp. 321-550, 40 figs., 13 pls., 2 maps. Sept. 6, 1901.

Volume 6

Plant life of Alabama. By Charles Mohr. Pp. 1-921, 13 pls. July 31, 1901.

Volume 7

Systematic and geographic botany and aboriginal uses of plants. Pp. 1-8 (title page, contents, and note); pp. 9-408 (papers 1-3); 21 pls., 78 figs. 1900-1902.

No.

1. Monograph of the North American Umbelliferae. By John M. Coulter and J. N. Rose. Pp. 9-256, 65 figs., 9 pls. Dec. 31, 1900.
2. The origin and distribution of the cocoa palm. By O. F. Cook. Pp. 257-293. Sept. 24, 1901.
3. Plants used by the Indians of Mendocino County, California. By V. K. Chesnut. Pp. 295-408, 13 figs., 12 pls. Jan. 24, 1902.

Volume 8

Mexican, Central American, and Porto Rican plants. Pp. i-xiii (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-339 (parts 1-4); pp. 341-373 (index); 19 figs., 73 pls. 1903-1905.

Part

1. Studies of Mexican and Central American plants—No. 3. By J. N. Rose. Pp. 1-55, 11 figs., 12 pls June 16, 1903.
2. Economic plants of Porto Rico. By O. F. Cook and G. N. Collins. Pp. 57-270, 2 figs., 47 pls. June 27, 1903.
3. A study of certain Mexican and Guatemalan species of *Polypodium.* By William R. Maxon. Pp. 271-280, 2 pls. June 27, 1903.
4. Studies of Mexican and Central American plants—No. 4. By J. N. Rose. Pp. 281-339, 6 figs., 10 pls. Apr. 20, 1905.

Volume 9

The useful plants of the Island of Guam. By William Edwin Safford. Pp. 1-416, 70 pls. Apr. 8, 1905.

Volume 10

Systematic investigations in phanerogams, ferns, and diatoms. Pp. i-xii (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-508 (parts 1-7); pp. 509-535 (index); 6 figs., 56 pls. 1906-1908.

Part

1. North American species of *Festuca*. By Charles V. Piper. Pp. 1-48, 15 pls. Mar. 30, 1906.
2. The genus *Ptelea* in the western and southwestern United States and Mexico. By Edward L. Greene. Pp. 49-78. July 16, 1906.
3. Studies of Mexican and Central American plants—No. 5. By J. N. Rose. Pp. 79-132, 6 figs., 28 pls. Dec. 5, 1906.
4. The Leguminosae of Porto Rico. By J. Perkins. Pp. 133-220. June 10, 1907.
5. Report on the diatoms of the *Albatross* voyages in the Pacific Ocean, 1888-1904. By Albert Mann. (Assisted in the bibliography and citations by P. L. Ricker.) Pp. 221-442, 11 pls. July 11, 1907.
6. The Cyperaceae of Costa Rica. By C. B. Clarke. Pp. 443-472. Jan. 21, 1908.
7. Studies of tropical American ferns—No. 1. By William R. Maxon. Pp. 473-508, 2 pls. Mar. 30, 1908.

Volume 11

Flora of the State of Washington. By Charles V. Piper. Pp. 1-637, 22 pls., 1 map. Oct. 8, 1906.

Volume 12

Systematic investigations and bibliography. Pp. i-xvi (title, advertisement, title page, note, preface, contents, and illustrations; pp. 1-455 (parts 1-10); pp. 457-474 (index); 67 figs., 85 pls. 1908-1909.

Part

1. Catalogue of the botanical library of John Donnell Smith, presented in 1905 to the Smithsonian Institution. Compiled by Alice Cary Atwood. Pp. 1-94. Apr. 23, 1908.
2. The Lecythidaceae of Costa Rica. By H. Pittier de Fábrega. Pp. 95-101, 4 figs., 8 pls. May 20, 1908.

   Tonduzia, a new genus of Apocynaceae from Central America. By H. Pittier de Fábrega. Pp. 103-104, 2 figs., 1 pl. May 20, 1908.

   A collection of plants from the vicinity of La Guaira, Venezuela. By J. R. Johnston. Pp. 105-111. May 20, 1908.
3. Types of American grasses: A study of the American species of grasses described by Linnaeus, Gronovius, Sloane, Swartz, and Michaux. By A. S. Hitchcock. Pp. 113-158. June 18, 1908.
4. The Mexican and Central American species of *Sapium*. By Henry Pittier. Pp. 159-169, 4 figs., 8 pls. Oct. 6, 1908.
5. New or noteworthy plants from Colombia and Central America. By Henry Pittier. Pp. 171-181, 9 figs., 2 pls. Jan. 27, 1909.
6. Catalogue of the grasses of Cuba. By A. S. Hitchcock. Pp. 183-258. Mar. 23, 1909.
7. Studies of Mexican and Central American plants—No. 6. By J. N. Rose. Pp. 259-302, 29 figs., 7 pls. Apr. 12, 1909.
8. The Allioniaceae of the United States, with notes on Mexican species. By Paul C. Standley. Pp. 303-389, 19 figs., 16 pls. Apr. 23, 1909.
9. *Thompsonella*, a new genus of Crassulaceae from Mexico. By N. L. Britton and J. N. Rose. Pp. 391-392, 2 pls. May 10, 1909.

   Rediscovery of *Echeveria carnicolor*. By J. N. Rose. P. 393, 1 pl. May 10, 1909.

   Three new species of Crassulaceae from Guatemala. By J. N. Rose. Pp. 395-396, 2 pls. May 10, 1909.

   Rediscovery of *Cereus nudiflorus*. By J. N. Rose. Pp. 397-398, 3 pls. May 10, 1909.

   A species of *Pereskia* from Guatemala. By J. N. Rose. P. 399, 3 pls. May 10, 1909.

New species of *Opuntia* from Arizona. By J. N. Rose. Pp. 401-402, 1 pl. May 10, 1909.

Echinocereus baileyi, a new cactus from Oklahoma. By J. N. Rose. P. 403, 2 pls. May 10, 1909.

Nopalea lutea, a new cactus from Guatemala. By J. N. Rose. P. 405, 1 pl. May 10, 1909.

Conzattia a new genus of Caesalpiniaceae. By J. N. Rose. Pp. 407-408, 1 pl. May 10, 1909.

Two new species of *Acacia* of the series Filicinae. By J. N. Rose. P. 409. May 10, 1909.

A new spleenwort from China. By William R. Maxon. P. 411, 1 pl. May 10, 1909.

10. The genus *Cereus* and its allies in North America. By N. L. Britton and J. N. Rose. Pp. 413-437, 16 pls. July 21, 1909.

Five new species of Crassulaceae from Mexico. By J. N. Rose. Pp. 439-440, 5 pls. July 21, 1909.

Supplement to the monograph of the North American Umbelliferae. By John M. Coulter and J. N. Rose. Pp. 441-451, 2 pls. July 21, 1909.

Apogamy in the maize plant. By G. N. Collins. Pp. 453-455, 2 pls. July 21, 1909.

Volume 13

Systematic and ecological investigations and bibliography. Pp. i-xvi (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-466 (parts 1-12); pp. 467-489 (index); 91 figs., 96 pls., 1 map. 1909-1912.

Part

1. Studies of tropical American ferns—No. 2. By William R. Maxon. Pp. 1-43, 1 fig., 9 pls. June 30, 1909.
2. Three new species of *Echeveria* from southern Mexico. By J. N. Rose and J. A. Purpus. Pp. 45-46, 5 pls. Feb. 21, 1910.
3. The grasses of Alaska. By F. Lamson-Scribner and Elmer D. Merrill. Pp. 47-92, 2 pls. June 8, 1910.
4. New or noteworthy plants from Colombia and Central America—2. By Henry Pittier. Pp. 93-132, 40 figs., 4 pls. June 11, 1910.
5. Relationships of the ivory palms. By O. F. Cook. Pp. 133-141, 3 figs. June 22, 1910.
6. 1. The type localities of plants first described from New Mexico. By Paul C. Standley. Pp. 143-227. 2. A bibliography of New Mexican botany. By Paul C. Standley. Pp. 229-246. 1 pl., 1 map. Oct. 31, 1910.
7. A preliminary treatment of the genus *Castilla.* By Henry Pittier. Pp. 247-279, 10 figs., 22 pls. Dec. 31, 1910.
8. The genus *Talinum* in Mexico. By J. N. Rose and Paul C. Standley. Pp. 281-288, 2 pls. Feb. 24, 1911.

   Two new species of *Harperella.* By J. N. Rose. Pp. 289-290. Feb. 24, 1911.
9. Studies of Mexican and Central American plants—No. 7. By J. N. Rose. Pp. 291-312, 1 fig., 22 pls. Apr. 11, 1911.
10. The Gyrophoraceae of California. By Albert W. C. T. Herre. Pp. 313-321, 6 pls. June 8, 1911.

    The plant life of Ellis, Great, Little, and Long Lakes in North Carolina. By William H. Brown. Pp. 323-341, 1 fig. June 8, 1911.

    A revision of the subgenus *Cyclobothra* of the genus *Calochortus.* By Joseph H. Painter. Pp. 343-350. June 8, 1911.

    A revision of the cichoriaceous genera *Krigia, Cynthia,* and *Cymbia.* By Paul C. Standley. Pp. 351-357. June 8, 1911.

    New or noteworthy plants from the eastern United States. By Edward S. Steele. Pp. 359-374. June 8, 1911.

    Two new shrubs from Lower California. By Paul C. Standley and E. A. Goldman. P. 375. June 8, 1911.
11. The Allioniaceae of Mexico and Central America. By Paul C. Standley. Pp. 377-430, 4 pls. July 12, 1911.
12. New or noteworthy plants from Colombia and Central America. By Henry Pittier. Pp. 431-466, 35 figs., 19 pls. Jan. 5, 1912.

Volume 14

Lichens of Minnesota; history of coconut palm; grama grasses. Pp. i-xiv (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-428 (parts 1-3); pp. 429-444 (index); 63 figs., 84 pls. 1910-1912.

Part

1. The lichens of Minnesota. By Bruce Fink. Pp. 1-269, 18 figs., 52 pls. June 1, 1910.
2. History of the coconut palm in America. By O. F. Cook. Pp. 271-342, 15 pls. Dec. 31, 1910.
3. The grama grasses: *Bouteloua* and related genera. By David Griffiths. Pp. 343-428, 45 figs., 17 pls. Feb. 24, 1912.

Volume 15

The North American species of *Panicum*. By A. S. Hitchcock and Agnes Chase. Pp. 1-396, 370 figs. Oct. 22, 1910.

Volume 16

Systematic investigations in phanerogams, ferns, and mosses. Pp. i-xv (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-371 (parts 1-14); pp. 373-389 (index); 54 figs., 133 pls., 1 map. 1912-1916.

Part

1. The relationship of *Asplenium andrewsii*. By William R. Maxon. Pp. 1-3, 2 pls. Feb. 13, 1912.

   Report on a collection of plants from the Pinacate region of Sonora. By J. N. Rose and Paul C. Standley. Pp. 5-20, 1 fig., 14 pls. Feb. 13, 1912.

   Tumamoca, a new genus of Cucurbitaceae. By J. N. Rose. P. 21, 1 pl. Feb. 13, 1912.

   New or interesting mosses from Panama. By R. S. Williams. Pp. 23-24. Feb. 13, 1912.
2. Studies of tropical American ferns—No. 3. By William R. Maxon. Pp. 25-62, 17 pls. June 19, 1912.
3. The North American species of Nymphaea. By Gerrit S. Miller, Jr., and Paul C. Standley. Pp. 63-108, 39 figs., 13 pls. July 6, 1912.
4. Descriptions of new plants preliminary to a report upon the flora of New Mexico. By E. O. Wooton and Paul C. Standley. Pp. 109-196, 3 pls. Feb. 12, 1913.
5. Supplementary notes on American species of *Festuca*. By Charles V. Piper. Pp. 197-199. Feb. 11, 1913.

   Delphinium simplex and its immediate allies. By Charles V. Piper. Pp. 201-203. Feb. 11, 1913.

   The identity of *Heuchera cylindrica*. By Charles V. Piper. Pp. 205-206. Feb. 11, 1913.

   New or noteworthy species of Pacific coast plants. By Charles V. Piper. Pp. 207-210. Feb. 11, 1913.

   The American species of *Meibomia* of the section *Nephromeria*. By J. N. Rose and Paul C. Standley. Pp. 211-216, 1 pl. Feb. 11, 1913.

   Raimondia, a new genus of Annonaceae from Colombia. By W. E. Safford. Pp. 217-219, 2 pls. Feb. 11, 1913.

   Four new species of goldenrod from the eastern United States. By E. S. Steele. Pp. 221-224. Feb. 11, 1913.
6. Three new genera of stilt palms (Iriarteaceae) from Colombia, with a synoptical review of the family. By O. F. Cook and C. B. Doyle. Pp. 225-238, 1 fig., 12 pls. Feb. 21, 1913.
7. Studies in Cactaceae—1. By N. L. Britton and J. N. Rose. Pp. 239-242, 8 pls. Apr. 10, 1913.
8. Relationships of the false date palm of the Florida Keys, with a synoptical key to the families of American palms. By O. F. Cook. Pp. 243-254, 4 pls. May 14, 1913.

9. The genus *Epiphyllum* and its allies. By N. L. Britton and J. N. Rose. Pp. 255-262, 7 pls. June 6, 1913.
10. *Annona sericea* and its allies. By William E. Safford. Pp. 263-275, 3 figs., 15 pls. Dec. 13, 1913.
11. Nomenclature of the sapote and the sapodilla. By O. F. Cook. Pp. 277-285, 2 pls. Dec. 13, 1913.
12. A monograph of the Hauyeae and Gongylocarpeae, tribes of the Onagraceae. By John Donnell Smith and J. N. Rose. Pp. 287-298, 10 figs. Aug. 23, 1913.
13. *Botrychium virginianum* and its forms. By Ivar Tidestrom. Pp. 299-303, 1 pl. Dec. 29, 1913.
    Sphenoclea zeylanica and *Caperonia palustris* in the southern United States. By Ivar Tidestrom. Pp. 305-307, 1 pl. Dec. 29, 1913.
14. Plant records of an expedition to Lower California. By Edward A. Goldman. Pp. 309-371, 30 pls. Feb. 10, 1916.

Volume 17

Systematic investigations in lichens and ferns, grasses and other phanerogams. Pp. i-xiv (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-625 (parts 1-8); pp. 627-647 (index); 149 figs., 54 pls. 1913-1916.

Part

1. The lichen flora of southern California. By Hermann Edward Hasse. Pp. 1-132. June 19, 1913.
2. Studies of tropical American ferns—No. 4. By William R. Maxon. Pp. 133-179, 7 figs., 10 pls. June 20, 1913.
3. Mexican grasses in the United States National Herbarium. By A. S. Hitchcock. Pp. 181-389. July 15, 1913.
4. Studies of tropical American ferns—No. 5. By William R. Maxon. Pp. 391-425, 3 figs., 13 pls. Jan. 21, 1914.
5. Studies of tropical American phanerogams—No. 1. By Paul C. Standley. Pp. 427-458, 8 pls. Jan. 30, 1914.
6. Tropical North American species of *Panicum*. By A. S. Hitchcock and Agnes Chase. Pp. 459-539, 139 figs. July 24, 1915.
7. Studies of tropical American ferns—No. 6. By William R. Maxon. Pp. 541-608, 12 pls. May 23, 1916.
8. Branching and flowering habits of cacao and patashte. By O. F. Cook. Pp. 609-625, 11 pls. June 28, 1916.

Volume 18

Systematic investigations of tropical American plants. Pp. i-xvii (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-471 (parts 1-7); pp. 473-494 (index); 104 figs., 106 pls. 1914-1917.

Part

1. Classification of the genus *Annona*, with descriptions of new and imperfectly known species. By W. E. Safford. Pp. 1-68, 75 figs., 41 pls. June 17, 1914.
2. New or noteworthy plants from Colombia and Central America—4. By Henry Pittier. Pp. 69-86, 12 figs., 15 pls. Apr. 16, 1914.
3. Studies of tropical American phanerogams—No. 2. By Paul C. Standley. Pp. 87-142. Feb. 11, 1916.
4. New or noteworthy plants from Colombia and Central America—5. By Henry Pittier. Pp. 143-171, 10 figs., 24 pls. Mar. 3, 1916.
5. Preliminary revision of the genus *Inga*. By Henry Pittier. Pp. 173-223, 25 pls. Oct. 30, 1916.
6. New or noteworthy plants from Colombia and Central America—6. By Henry Pittier. Pp. 225-259, 7 figs., 1 pl. Sept. 22, 1917.
7. Grasses of the West Indies. By A. S. Hitchcock and Agnes Chase. Pp. 261-471. Sept. 1, 1917.

Volume 19

Flora of New Mexico. By E. O. Wooton and Paul C. Standley. Pp. 1-794. June 24, 1915.

Volume 20

Systematic studies of American plants. Pp. i-xv (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-588 (parts 1-14); pp. 589-605 (index); 70 figs., 51 pls. 1917-1925.

Part

1. The Mexican and Central American species of *Ficus*. By Paul C. Standley. Pp. 1-35. May 31, 1917.
2. The Middle American species of *Lonchocarpus*. By Henry Pittier. Pp. 37-93, 43 figs., 6 pls. Aug. 3, 1917.
3. New or noteworthy plants from Colombia and Central America—7. By Henry Pittier. Pp. 95-132, 19 figs., 1 pl. June 18, 1917.
4. The North American species of *Aquilegia*. By Edwin Blake Payson. Pp. 133-157, 7 pls. Oct. 14, 1918.
5. The allies of *Selaginella rupestris* in the southeastern United States. By G. P. Van Eseltine. Pp. 159-172, 8 figs., 8 pls. Oct. 1, 1918.
6. Studies of tropical American phanerogams. By Paul C. Standley. Pp. 173-220. Aug. 29, 1919.
7. The genus *Homalium* in America. By S. F. Blake. Pp. 221-235. Sept. 9, 1919.
   New South American spermatophytes collected by H. M. Curran. By S. F. Blake. Pp. 237-245. Sept. 9, 1919.
8. The North American species of *Asterella*. By Alexander W. Evans. Pp. 247-312. Apr. 29, 1920.
9. Scrophulariaceae of the central Rocky Mountain States. By Francis W. Pennell. Pp. 313-381. Apr. 29, 1920.
10. Revision of the genus *Acanthospermum*. By S. F. Blake. Pp. 383-392, 1 pl. June 20, 1921.
    Revision of the genus *Flourensia*. By S. F. Blake. Pp. 393-409. June 20, 1921.
    Revision of the genus *Oyedaea*. By S. F. Blake. Pp. 411-422. June 20, 1921.
    Revision of the genus *Tithonia*. By S. F. Blake. Pp. 423-436. June 20, 1921.
11. The identification of *Berberis aquifolium* and *Berberis repens*. By Charles V. Piper. Pp. 437-451, 3 pls. Jan. 26, 1922.
12. New or noteworthy plants from Colombia and Central America—8. By Henry Pittier. Pp. 453-490, 4 pls. Jan. 9, 1922.
13. Revision of the American species of *Rinorea*. By S. F. Blake. Pp. 491-518, 7 pls. July 19, 1924.
    New plants from Venezuela. By S. F. Blake. Pp. 519-541, 10 pls. July 19, 1924.
    Hemibaccharis, a new genus of Baccharidinae. By S. F. Blake. Pp. 543-554, 4 pls. July 19, 1924.
14. The American species of *Canavalia* and *Wenderothia*. By C. V. Piper. Pp. 555-588. Apr. 27, 1925.

Volume 21

Flora of the District of Columbia and vicinity. By A. S. Hitchcock and Paul C. Standley. Pp. 1-329, 1 fig., 42 pls. 1919.

Volume 22

Systematic plant studies, chiefly tropical American. Pp. i-xiv (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-748 (parts 1-10); pp. 749-777 (index); 87 figs., 64 pls. 1920-1927.

Part

1. Revisions of North American grasses: The North American species of *Ichnanthus*. By A. S. Hitchcock. Pp. 1-12, 9 pls.; The North American species of *Lasiacis*. By A. S. Hitchcock. Pp. 13-31, 15 pls.; The North American species of *Brachiaria*. By Agnes Chase. Pp. 33-43, 6 figs.; The North American species of *Cenchrus*. By Agnes Chase. Pp. 45-77, 14 figs. Mar. 29, 1920.
2. A study of *Allocarya*. By Charles V. Piper. Pp. 79-113. Mar. 13, 1920.
3. Revisions of North American grasses: The North American species of *Isachne*. By A. S. Hitchcock. Pp. 115-121, 8 pls.; The North American species of

Oplismenus. By A. S. Hitchcock. Pp. 123-132, 4 figs.; The North American species of *Echinochloa.* By A. S. Hitchcock. Pp. 133-153, 11 figs.; The North American species of *Chaetochloa.* By A. S. Hitchcock. Pp. 155-208, 27 figs. Nov. 1, 1920.

4. The North American species of *Pennisetum.* By Agnes Chase. Pp. 209-234, 14 figs. Feb. 2, 1921.
5. Flora of Glacier National Park, Montana. By Paul C. Standley. Pp. 235-438, 20 pls. Mar. 16, 1921.
6. Grasses of British Guiana. By A. S. Hitchcock. Pp. 439-515, 10 figs., 1 pl. May 24, 1922.
7. The North American species of *Aristida.* By A. S. Hitchcock. Pp. 517-586. May 21, 1924.
8. New American Asteraceae. By S. F. Blake. Pp. 587-661, 1 fig., 10 pls. May 22, 1924.
9. Studies in American Phaseolineae. By C. V. Piper. Pp. 663-701, 1 pl. June 12, 1926.
10. The North American species of *Scutellaria.* By Emery C. Leonard. Pp. 703-748. Feb. 9, 1927.

Volume 23

Trees and shrubs of Mexico. By Paul C. Standley. Pp. i-vii (title, advertisement, note, preface, contents); pp. 1-1681 (parts 1-5); pp. 1683-1721 (index). 1920-1926.

Part

1. Gleicheniaceae-Betulaceae. Pp. 1-169. Oct. 11, 1920.
2. Fagaceae-Fabaceae. Pp. 171-515. July 14, 1922.
3. Oxalidaceae-Turneraceae. Pp. 517-848. July 18, 1923.
4. Passifloraceae-Scrophulariaceae. Pp. 849-1312. Dec. 31, 1924.
5. Bignoniaceae-Asteraceae. Pp. 1313-1681. Nov. 15, 1926.

Volume 24

Plant studies, chiefly tropical American. Pp. i-xii (title, advertisement, title page, note, preface, contents, and illustrations); pp. 1-762 (parts 1-9); pp. 763-802 (index); 4 figs., 52 pls. 1922-1930.

Part

1. New plants from Guatemala and Honduras. By S. F. Blake. Pp. 1-32, 4 figs., 10 pls. Jan. 11, 1922.
2. Studies of tropical American ferns—No. 7. By William R. Maxon. Pp. 33-63, 10 pls. Aug. 15, 1922.
3. Key to genus *Diplostephium,* with descriptions of new species. By S. F. Blake. Pp. 65-86, 8 pls. Aug. 11, 1946.
4. Native names and uses of some plants of eastern Guatemala and Honduras. By S. F. Blake. Pp. 87-100, 5 pls. Aug. 18, 1922.
5. Economic fruit-bearing plants of Ecuador. By Wilson Popenoe. Pp. 101-134, 16 pls. May 28, 1924.
6. A bibliographic study of Beauvois' Agrostographie. By Cornelia D. Niles. With introduction and botanical notes, by Agnes Chase. Pp. 135-214. Aug. 20, 1925.
7. The North American species of *Stipa.* By A. S. Hitchcock. Pp. 215-262, 3 pls. Nov. 20, 1925.

   Synopsis of the South American species of *Stipa.* By A. S. Hitchcock. Pp. 263-289. Nov. 20, 1925.
8. The grasses of Ecuador, Peru, and Bolivia. By A. S. Hitchcock. Pp. 291-556. May 4, 1927.
9. The grasses of Central America. By A. S. Hitchcock. Pp. 557-762. Feb. 12, 1930.

Volume 25

Flora of Utah and Nevada. By Ivar Tidestrom. Pp. 1-655, 2 figs., 15 pls., 1 map. Oct. 31, 1925.

Volume 26

Systematic plant studies: mainly tropical America. Pp. i-xii (title, advertisement, title page, dates of publication, errata, preface, contents, and illustrations); pp. 1-530 (parts 1-10); pp. 531-554 (index); 39 figs., 40 pls. 1927-1939.

Part

1. The Lecythidaceae of Central America. By H. Pittier. Pp. 1-14, 12 pls. May 2, 1927.
2. The Piperaceae of Panama. By William Trelease. Pp. 15-50. May 21, 1927.
3. Costa Rican mosses collected by Paul C. Standley in 1924-1926. By Edwin B. Bartram. Pp. 51-114, 39 figs. Oct. 31, 1928.
4. The Piperaceae of Costa Rica. By William Trelease. Pp. 115-226. Dec. 31, 1929.
5. Notes on certain type specimens of American Asteraceae in European herbaria. By S. F. Blake. Pp. 227-263. Mar. 10, 1930.
6. Asiatic Pteridophyta collected by Joseph F. Rock, 1920-1924. By Carl Christensen. Pp. 265-337, 17 pls. Apr. 2, 1931.
7. The Mexican and Central American species of *Viburnum*. By C. V. Morton. Pp. 339-366. Nov. 16, 1933.
8. New species of *Pilea* from the Andes. By Ellsworth P. Killip. Pp. 367-394. Jan. 30, 1936.
9. A revision of *Besleria*. By C. V. Morton. Pp. 395-474. May 9, 1939.
10. The Andean species of *Pilea*. By Ellsworth P. Killip. Pp. 475-530, 11 pls. June 14, 1939.

Volume 27

Flora of the Panama Canal Zone. By Paul C. Standley. Pp. i-x, 1-416, 7 figs., 67 pls. Jan. 31, 1928.

Volume 28

Systematic plant studies. Pp. i-xii (title, advertisement, title page, dates of publication, errata, preface, contents, and illustrations); pp. 1-675 (parts 1-4); pp. 677-694 (index); 144 figs., $27 pls. 1929-1941.

Part

1. The North American species of *Paspalum*. By Agnes Chase. Pp. 1-310, 142 figs. June 28, 1929.
2. The American species of Thibaudieae. By Albert C. Smith. Pp. 311-547, 1 fig., 19 pls. June 27, 1932.
3. Marine algae of the Smithsonian-Hartford Expedition to the West Indies, 1937. By William Randolph Taylor. Pp. 549-561, 1 pl. June 12, 1940.
4. Plants collected by R. C. Ching in southern Mongolia and Kansu Province, China. By Egbert H. Walker. Pp. 563-675, 1 fig., 7 pls. July 22, 1941.

Volume 29

[Volume in progress.]

Part

1. Taxonomic studies of tropical American plants. By C. V. Morton. Pp. 1-86. Mar. 23, 1944.
2. Mexican phanerogams described by M. E. Jones. By C. V. Morton. Pp. 87-116. May 21, 1945.

   Asteraceae described from Mexico and the southwestern United States by M. E. Jones, 1908-1935. By S. F. Blake. Pp. 117-137. May 21, 1945.
3. The American species of *Hymenophyllum*, section *Sphaerocionium*. By C. V. Morton. (In press.)

Volume 30

[Volume in progress.]

Part

1. A botanical bibliography of the islands of the Pacific. By Elmer D. Merrill. (In press.)

   A subject index to Elmer D. Merrill's "A Botanical Bibliography of the Islands of the Pacific." By Egbert H. Walker. (In press.)

SPECIAL BULLETINS

No.

1. Life histories of North American birds with special reference to their breeding habits and eggs. By Charles Bendire. Pp. viii, 1-446, 12 pls. (col.). 1892.
2. Oceanic ichthyology, a treatise on the deep-sea and pelagic fishes of the world, based chiefly upon the collections made by the steamers *Blake, Albatross,* and *Fish Hawk* in the Northwestern Atlantic. By George Brown Goode and Tarleton H. Bean. Vol. 1, pp. xxxv, 1-553, 24 figs., 1 diagram; Vol. 2, pp. xxiii, 1-26, 123 pls. 1895.
3. Life histories of North American birds, from the parrots to the grackles, with special reference to the breeding habits and eggs. By Charles Bendire. Pp. ix, 1-518, 7 pls. (col.). 1895.
4. American hydroids. By Charles Cleveland Nutting. Pt. 1, The Plumularidae, pp. ii, 1-285, 124 figs., 34 pls., 1900. Pt. 2, The Sertularidae, pp. ii, 1-325; 139 figs., 41 pls., 1904. Pt. 3, The Campanularidae and the Bonneviellidae, pp. iii, 1-126, 68 figs., 27 pls., 1915.

PROCEEDINGS

Volume 1

Proceedings of the United States National Museum, vol. 1. Pp. i-iv (title page and table of contents); pp. 1-488 (Proceedings papers 1-61); pp. 489-520 (index); 7 figs., 8 pls. 1879.

Proc. No.

1. Descriptions of new forms of mollusks from Alaska contained in the collections of the National Museum. By W. H. Dall. Pp. 1-3. Mar. 27, 1878.[1]
2. Postpliocene fossils in the coast range of California. By W. H. Dall. P. 3. Mar. 27, 1878.
3. Notes on the American species of the genus *Cybium*. By Felipe Poey. Pp. 3-5. Mar. 27, 1878.
4. The *Clupea tyrannus* of Latrobe. By G. Brown Goode. Pp. 5-6. Mar. 27, 1878.
5. The occurrence of *Belone latimanus* in Buzzard's Bay, Massachusetts. By G. Brown Goode. Pp. 6-7. Mar. 27, 1878.
6. The voices of crustaceans. By G. Brown Goode. Pp. 7-8. Mar. 27, 1878.
7. On a new humming bird (*Atthis ellioti*) from Guatemala. By Robert Ridgway. Pp. 8-10, 2 figs. Mar. 27, 1878.
8. Fossil mollusks from later Tertiaries of California. By W. H. Dall. Pp. 10-16. Mar. 27, 1878.
9. The manufacture of porpoise-oil. By Caleb Cook. P. 16, Mar. 27, 1878; pp. 17-18. Sept. 12, 1878.
10. The Craig flounder of Europe, *Glyptocephalus cynoglossus*, on the coast of North America. By G. Brown Goode and Tarleton H. Bean. Pp. 19-23. Sept. 12, 1878.
11. Note on shells from Costa Rica kitchenmidden, collected by Drs. Flint and Bransford. By W. H. Dall. Pp. 23-24. Sept. 12, 1878.
12. Arsenic acid for protecting anatomical preparations from insects. By J. B. S. Jackson. P. 24. Sept. 12, 1878.
13. The oceanic bonito on the coast of the United States. By G. Brown Goode and Tarleton H. Bean. Pp. 24-26. Sept. 12, 1878.
14. Distribution of Californian Tertiary fossils. By W. H. Dall. Pp. 26-30. Sept. 12, 1878.
15. A revision of the American species of the genus *Brevoortia*, with a description of a new species from the Gulf of Mexico. By G. Brown Goode. Pp. 30-42. Sept. 12, 1878.
16. Description of *Caulolatilus microps*, a new species of fish from the Gulf coast of Florida. By G. Brown Goode and Tarleton H. Bean. Pp. 42-45. Sept. 12, 1878.
17. The occurrence of *Hippocampus antiquorum*, or an allied form, on Saint George's Banks. By G. Brown Goode. Pp. 45-46. Sept. 12, 1878.
18. Descriptions of new species of shells from California in the collections of the National Museum. By W. H. Dall. Pp. 46-47. Sept. 12, 1878.
19. Catalogue of the birds of Dominica from collections made for the Smithsonian Institution by Frederick A. Ober, together with his notes and observations. By George N. Lawrence. Pp. 48-69. Sept. 12, 1878.
20. Notes on a collection of fishes from Clackamas River, Oregon. By David S. Jordan. Pp. 69-85. Sept. 12, 1878.
21. A review of the American species of the genus *Scops*, Savigny. By Robert Ridgway. Pp. 85-112, Sept. 12, 1878; pp. 113-117. Oct. 9, 1878.
22. Notes on the ornithology of southern Texas, being a list of birds observed in the vicinity of Fort Brown, Texas, from February, 1876, to June, 1878. By James C. Merrill. Pp. 118-160, Oct. 9, 1878; pp. 161-173, 3 pls., Oct. 24, 1878.

[1] Proceedings papers Nos. 1-760 were issued by signatures, and when the published date for a signature differs from the date it was received from the printer at the National Museum, the latter date has been used here as the actual date of publication. After No. 760 each article has its actual date of publication recorded in the completed volume of Proceedings.

Proc. No.

23. On a new serranoid fish, *Epinephelus drummond-hayi,* from the Bermudas and Florida. By G. Brown Goode and Tarleton H. Bean. Pp. 173-175. Oct. 24, 1878.

24. Descriptions of two new species of fishes, *Lutjanus blackfordii* and *Lutjanus stearnsii,* from the coast of Florida. By G. Brown Goode and Tarleton H. Bean. P. 176, Oct. 24, 1878; pp. 177-181, Oct. 28, 1878.

25. A note on the Gulf menhaden, *Brevoortia patronus,* Goode. By Silas Stearns. Pp. 181-182. Oct. 28, 1878.

26. A note upon the black grouper (*Epinephelus nigritus*) (Holbrook, Gill) of the southern coast. By G. Brown Goode and Tarleton H. Bean. Pp. 182-184. Oct. 28, 1878.

27. Catalogue of the birds of St. Vincent, from collections made by Mr. Fred A. Ober, under the directions of the Smithsonian Institution, with his notes thereon. By George N. Lawrence. Pp. 185-198. Oct. 28, 1878.

28. Description of a new sparoid fish, *Sargus holbrookii,* from Savannah Bank. By Tarleton H. Bean. Pp. 198-200. Oct. 28, 1878.

29. Catalogue of casts taken by Clark Mills, Esq., of the heads of sixty-four Indian prisoners of various western tribes, and held at Fort Marion, Saint Augustine, Fla., in charge of Capt. R. H. Pratt, U. S. A. [By R. H. Pratt.] Pp. 201-208, Oct. 28, 1878; pp. 209-214, Dec. 18, 1878.

30. Synopsis of the pediculate fishes of the eastern coast of extratropical North America. By Theodore Gill. Pp. 215-221. Dec. 18, 1878.

31. Note on the Antennariidae. By Theodore Gill. Pp. 221-222. Dec. 18, 1878.

32. On the proper specific name of the common antennariid *Pterophryne.* By Theodore Gill. Pp. 223-224, Dec. 18, 1878; pp. 225-226, Dec. 23, 1878.

33. Note on the Ceratiidae. By Theodore Gill. Pp. 227-231. Dec. 23, 1878.

34. Note on the Maltheidae. By Theodore Gill. Pp. 231-232. Dec. 23, 1878.

35. Catalogue of the birds of Antigua and Barbuda, from collections made for the Smithsonian Institution, by Mr. Fred A. Ober, with his observations. By George N. Lawrence. Pp. 232-240, Dec. 23, 1878; pp. 241-242, 1878? (exact date of publication unknown).

36. Note on *Perca flavescens.* By Franz Steindachner. P. 243. 1878? (exact date of publication unknown).

37. On the destruction of fish in the vicinity of the Tortugas during the months of September and October, 1878. By J. P. Jefferson, Joseph Y. Porter, and Thomas Moore. Pp. 244-246. 1878? (exact date of publication unknown).

38. Descriptions of several new species and geographical races of birds contained in the collection of the United States National Museum. By Robert Ridgway. Pp. 247-252. 1878? (exact date of publication unknown).

39. Description of two new species of birds from Costa Rica, and notes on other rare species from that country. By Robert Ridgway. Pp. 252-255. 1878? (exact date of publication unknown).

40. Description of two gadoid fishes, *Phycis chesteri* and *Haloporphyrus viola,* from the deep-sea fauna of the northwestern Atlantic. By G. Brown Goode and Tarleton H. Bean. P. 256, 1878? (exact date of publication unknown); pp. 257-260, Feb. 5, 1879.

41. Description of *Argentina syrtensium,* a new deep-sea fish from Sable Island Bank. By G. Brown Goode and Tarleton H. Bean. Pp. 261-263. Feb. 5, 1879.

42. On the occurrence of the oceanic bonito, *Orcynus pelamys,* (Linné) Poey, in Vineyard Sound, Massachusetts. By Vinal N. Edwards. P. 263. Feb. 5, 1879.

43. Notes on the western gizzard shad, *Dorosoma cepedianum heterurum,* (Raf.) Jordan. By Samuel Wilmot. Pp. 263-264. Feb. 5, 1879.

44. The occurrence of the Canada porcupine in West Virginia. By G. Brown Goode. Pp. 264-265. Feb. 5, 1879.

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45. Catalogue of the birds of Grenada, from a collection made by Mr. Fred. A. Ober for the Smithsonian Institution, including others seen by him, but not obtained. By George N. Lawrence. Pp. 265-272, Feb. 5, 1879; pp. 273-278, Feb. 15, 1879.

46. On the breeding habits of the sea-catfish (*Ariopsis milberti?*). By N. T. Lupton. Pp. 278-279. Feb. 15, 1879.

47. On the occurrence of *Stichaeus punctatus,* (Fabr.) Kröyer, at St. Michael's, Alaska. By Tarleton H. Bean. Pp. 279-281. Feb. 15, 1879.

48. Report on the limpets and chitons of the Alaskan and Arctic regions, with descriptions of genera and species believed to be new. By W. H. Dall. Pp. 281-288, figs. A-C, Feb. 15, 1879; pp. 289-336, figs. D, E, Feb. 17, 1879; pp. 337-344, 5 pls., Feb. 19, 1879.

49. On the identity of *Euchalarodus putnami,* Gill, with *Pleuronectes glaber,* (Storer) Gill, with notes on the habits of the species. By Tarleton H. Bean. Pp. 345-348. Feb. 19, 1879.

50. The identity of *Rhinonemus caudacuta* (Storer) Gill with *Gadus cimbrius,* Linn. By G. Brown Goode and Tarleton H. Bean. Pp. 348-349. Feb. 19, 1879.

51. Catalogue of the birds collected in Martinique by Mr. Fred. A. Ober for the Smithsonian Institution. By George N. Lawrence. Pp. 349-352, Feb. 19, 1879; pp. 353-360, Mar. 17, 1879.

52. Notes on *Platessa ferruginea,* D. H. Storer, and *Platessa rostrata,* H. R. Storer. By G. Brown Goode and Tarleton H. Bean. Pp. 361-362. Mar. 17, 1879.

53. On the identity of *Brosmius americanus,* Gill, with *Brosmius brosme,* (Müller) White. By G. Brown Goode and Tarleton H. Bean. Pp. 362-363. Mar. 17, 1879.

54. On the mortality of fishes in the Gulf of Mexico in 1878. By J. P. Jefferson. Pp. 363-364. Mar. 17, 1879.

55. Notes on the fishes of Beaufort Harbor, North Carolina. By David S. Jordan and Charles H. Gilbert. Pp. 365-384, Mar. 17, 1879; pp. 385-388, Mar. 25, 1879.

56. A partial list of the birds of central California. By L. Belding. [Edited by R. Ridgway.] Pp. 388-432, Mar. 25, 1879; pp. 433-448, Mar. 28, 1879; p. 449, ?Apr. 30, 1879.

57. Catalogue of a collection of birds obtained in Guadeloupe for the Smithsonian Institution, by Mr. Fred. A. Ober. By George N. Lawrence. Pp. 449-462. ?Apr. 30, 1879.

58. On two fishes from the Bermudas mistakenly described as new by Dr. Günther. By G. Brown Goode. Pp. 462-463. ?Apr. 30, 1879.

59. Description of a species of *Lycodes* (*L. turneri*) from Alaska, believed to be undescribed. By Tarleton H. Bean. Pp. 463-466. ?Apr. 30, 1879.

60. Descriptions of new species and races of American birds, including a synopsis of the genus *Tyrannus,* Cuvier. By Robert Ridgway. Pp. 466-480, ?Apr. 30, 1879; pp. 481-486, May ? 1879.

61. A general catalogue of the birds noted from the islands of the Lesser Antilles visited by Mr. Fred. A. Ober; with a table showing their distribution, and those found in the United States. By George N. Lawrence. Pp. 486-488. May ? 1879.

Volume 2

Proceedings of the United States National Museum, vol. 2. Pp. i-iv (title page and table of contents); pp. 1-482 (Proceedings papers 62-101); pp. 483-499 (index); 2 figs., 7 pls. 1880.

62. Notes on the nests and eggs of the eight North American species of Empidonaces. By T. M. Brewer. Pp. 1-10. May 2?, 1879.

63. A list of European fishes in the collection of the United States National Museum. By Tarleton H. Bean. Pp. 10-16, May 2?, 1879; pp. 17-32, May 6, 1879; pp. 33-44, July 7, 1879.

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64. Description of a species of *Lycodes* (*L. paxillus*) obtained by the United States Fish Commission. By G. Brown Goode and Tarleton H. Bean. Pp. 44-46. July 7, 1879.

65. Description of a new species of *Liparis* (*L. ranula*) obtained by the United States Fish Commission off Halifax, Nova Scotia. By G. Brown Goode and Tarleton H. Bean. Pp. 46-48. July 7, 1879.

66. Description of a new species of amber fish (*Seriola stearnsii*) obtained near Pensacola, Florida, by Mr. Silas Stearns. By G. Brown Goode and Tarleton H. Bean. Pp. 48-51. July 7, 1879.

67. On the birds of Heligoland. By H. Gätke. Pp. 51-55. July 7, 1879.

68. Description of *Alepocephalus bairdii,* a new species of fish from the deep-sea fauna of the western Atlantic. By G. Brown Goode and Tarleton H. Bean. Pp. 55-57. July 7, 1879.

69. On the species of *Astroscopus* of the eastern United States. By Tarleton H. Bean. Pp. 57-63. July 7, 1879.

70. On the occurrence of *Hippoglossus vulgaris,* Flem., at Unalashka and St. Michael's, Alaska. By Tarleton H. Bean. Pp. 63-66. July 7, 1879.

71. Description of an apparently new species of *Gasterosteus (G. atkinsii)* from the Schoodic Lakes, Maine. By Tarleton H. Bean. Pp. 67-69. July 7, 1879.

72. Review of the Pleuronectidae of San Francisco. By W. N. Lockington. Pp. 69-80, July 7, 1879; pp. 81-96, July 15, 1879; pp. 97-108, 1879 (exact date of publication unknown).

73. A preliminary catalogue of the fishes of the St. John's River and the east coast of Florida, with descriptions of a new genus and three new species. By G. Brown Goode. Pp. 108-121. 1879 (exact date of publication unknown).

74. Catalogue of a collection of fishes sent from Pensacola, Florida, and vicinity, by Mr. Silas Stearns, with descriptions of six new species. By G. Brown Goode and Tarleton H. Bean. Pp. 121-128, 1879 (exact date of publication unknown); pp. 129-144, Sept. 25, 1879; pp. 145-156, Nov. 14, 1879.

75. Notes on New England Isopoda. By Oscar Harger. Pp. 157-165. Nov. 14, 1879.

76. Notice of recent additions to the marine Invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. Part 1—Annelida, Gephyraea, Nemertina, Nematoda, Polyzoa, Tunicata, Mollusca, Anthozoa, Echinodermata, Porifera. By A. E. Verrill. Pp. 165-192, Nov. 14, 1879; pp. 193-205. Nov. 12, 1879.

77. Description of a new genus and species of fish, *Lopholatilus chamaeleonticeps,* from the south coast of New England. By G. Brown Goode and Tarleton H. Bean. Pp. 205-208, Nov. 12, 1879; p. 209, Dec. 17, 1879.

78. On the occurrence of *Lycodes vahlii,* Reinhardt, on La Have and Grand Banks. By G. Brown Goode and Tarleton H. Bean. Pp. 209-210. Dec. 17, 1879.

79. List of names, age, tribe, etc., of Indian boys and girls at Hampton Normal and Agricultural Institute, Virginia, plaster casts of whose heads were taken by Clark Mills, Esq., March, 1879. By R. H. Pratt. P. 211. Dec. 17, 1879.

80. Description of a new fish from Alaska *(Anarrhichas lepturus),* with notes upon other species of the genus *Anarrhichas.* By Tarleton H. Bean. Pp. 212-218. Dec. 17, 1879.

81. Notes on certain typical specimens of American fishes in the British Museum and in the Museum d'Histoire Naturelle at Paris. By David S. Jordan. Pp. 218-224, Dec. 17, 1879; pp. 225-226, Feb. 3, 1880.

82. List of marine Invertebrata from the New England coast, distributed by the U. S. Commission of Fish and Fisheries. Series I. [By Richard Rathbun.] Pp. 227-232. Feb. 3, 1880.

83. Occurrence of *Chelura terebrans,* a crustacean destructive to the timber of submarine structures, on the coast of the United States. By Sidney I. Smith. Pp. 232-235, 2 figs. Feb. 3, 1880.

84. Description of new species of North American fishes. By David S. Jordan. Pp. 235-241. Feb. 3, 1880.

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85. On the migrations and nesting habits of west-coast birds. By J. G. Cooper. Pp. 241-251. Feb. 3, 1880.

86. Descriptions of new species of Carboniferous invertebrate fossils. By C. A. White. Pp. 252-256, Feb. 3, 1880; pp. 257-260, 1 pl., Feb. 21, 1880.

87. A study of the trunk-fishes (Ostraciontidae), with notes upon the American species of the family. By G. Brown Goode. Pp. 261-272, Feb. 21, 1880; pp. 273-283, Mar. 30, 1880.

88. On the habits of the Rocky Mountain goat. By James C. Merrill. Pp. 283-284. Mar. 30, 1880.

89. Notes on a collection of fishes from eastern Georgia. By Tarleton H. Bean. Pp. 284-286. Mar. 30, 1880.

90. Description of a new species of *Amiurus (A. ponderosus)* from the Mississippi River. By Tarleton H. Bean. Pp. 286-290. Mar. 30, 1880.

91. Note on *Endothyra ornata*. By C. A. White. P. 291. Mar. 30, 1880.

92. Note on *Criocardium* and *Ethmocardium*. By C. A. White. Pp. 291-292. Mar. 30, 1880.

93. Descriptions of new Cretaceous invertebrate fossils from Kansas and Texas. By C. A. White. Pp. 292-298, 5 pls. Mar. 30, 1880.

94. Notes on a collection of fishes obtained in the streams of Guanajuato and in Chapala Lake, Mexico, by Prof. A. Dugès. By David S. Jordan. Pp. 298-301. Mar. 30. 1880.

95. Descriptions of two species of fishes collected by Prof. A. Dugès in central Mexico. By Tarleton H. Bean. Pp. 302-304, Mar. 30, 1880; p. 305, Mar. 31, 1880.

96. Report of experiments upon the animal heat of fishes, made at Provincetown, Mass., during the summer of 1879, in connection with operations of the United States Fish Commission. By J. H. Kidder. Pp. 306-326. Mar. 31, 1880.

97. Descriptions of new genera and species of fishes from the coast of California. By W. N. Lockington. Pp. 326-332. Mar. 31, 1880.

98. Catalogue of a collection of fishes obtained in the Gulf of Mexico, by Dr. J. W. Velie, with descriptions of seven new species. By G. Brown Goode and Tarleton H. Bean. Pp. 333-345. Mar. 31, 1880.

99. Notice of a new species of the "Willemoesia group of Crustacea" (Recent Eryontidae). By Sidney I. Smith. Pp. 345-352, Mar. 31, 1880; p. 353, 1 pl., Apr. 8, 1880.

100. Descriptions of some genera and species of Alaskan fishes. By Tarleton H. Bean. Pp. 353-359. Apr. 8, 1880.

101. Fourth instalment of ornithological bibliography: Being a list of faunal publications relating to British birds. By Elliott Coues. Pp. 359-368, Apr. 8, 1880; pp. 369-384, Apr. 16, 1880; pp. 385-400, Apr. 19, 1880; 401-416, Apr. 16, 1880; pp. 417-432, Apr. 19, 1880; pp. 433-448, May 5, 1880; pp. 449-464, 1880 (exact date of publication unknown); 465-480, June 28, 1880; 481-482, July 6, 1880.

Volume 3

Proceedings of the United States National Museum, vol. 3. Pp. i-v (title page and table of contents); pp. 1-537 (Proceedings papers 102-184); pp. 539-589 (index); 11 figs., 2 pls. 1881.

102. Revisions of nomenclature of certain North American birds. By Robert Ridgway. Pp. 1-16, 1880 (exact date of publication unknown).

103. Description of a new species of bird of the family Turdidae, from the Island of Dominica, W. I. By Geo. N. Lawrence. Pp. 16-17, 1880 (exact date of publication unknown).

104. Notes on a collection of fishes from east Florida, obtained by Dr. J. A. Henshall. By David S. Jordan. Pp. 17-21, 1880 (exact date of publication unknown).

105. Notes on a collection of fishes from Saint John's River, Florida, obtained by Mr. A. H. Curtiss. By David S. Jordan. P. 22, 1880 (exact date of publication unknown).

Proc. No.

106. Notes on a collection of fishes from San Diego, California. By David S. Jordan and Charles H. Gilbert. Pp. 23-32, 1880 (exact date of publication unknown); pp. 33-34, May 18, 1880.

107. Description of a new flounder *(Xystreurys liolepis)*, from Santa Catalina Island, California. By David S. Jordan and Charles H. Gilbert. Pp. 34-36. May 18, 1880.

108. Description of a new ray *(Platyrhina triseriata)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 36-38. May 18, 1880.

109. Description of a new species of "rock cod" (*Sebastichthys serriceps*), from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 38-40. May 18, 1880.

110. On the occurrence of *Cephaloscyllium laticeps* (Duméril) Gill, on the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 40-42. May 18, 1880.

111. On the oil-shark of southern California *(Galeorhinus galeus)*. By David S. Jordan and Charles H. Gilbert. Pp. 42-43. May 18, 1880.

112. The surf-smelt of the Northwest coast, and the method of taking them by the Quillehute Indians, west coast of Washington Territory. By James G. Swan. Pp. 43-46. May 18, 1880.

113. Note on the occurrence of *Productus giganteus* in California. By C. A. White. Pp. 46-47, 1 pl. May 18, 1880.

114. Note on *Acrothele*. By C. A. White. P. 47. May 18, 1880.

115. Description of a new Cretaceous *Pinna* from New Mexico. By C. A. White. Pp. 47-48. May 18, 1880.

116. Note on the occurrence of *Stricklandinia salteri* and *S. davidsoni* in Georgia. Pp. 48-49. May 18, 1880.

117. Description of a new flounder (*Pleuronichthys verticalis*), from the coast of California, with notes on other species. By David S. Jordan and Charles H. Gilbert. Pp. 49-51. May 18, 1880.

118. Notes on sharks from the coast of California. By David S. Jordan and Chas. H. Gilbert. Pp. 51-52. May 18, 1880.

119. On the generic relations of *Platyrhina exasperata*. By David S. Jordan and Charles H. Gilbert. P. 53. May 18, 1880.

120. Remarks on the species of the genus *Chirus* found in San Francisco market, including one hitherto undescribed. By W. N. Lockington. Pp. 53-57. May 18, 1880.

121. Description of a new fish from Alaska *(Uranidea microstoma)*. By W. N. Lockington. Pp. 58-59. May 18, 1880.

122. Description of a new species of Agonidae *(Brachyopsis verrucosus)*, from the coast of California. By W. N. Lockington. Pp. 60-63. May 18, 1880.

123. Description of a new genus and some new species of California fishes *(Icosteus aenigmaticus* and *Osmerus attenuatus)*. By W. N. Lockington. Pp. 63-64, May 18, 1880; pp. 65-68, July 8, 1880.

124. Description of a new hake (*Phycis earllii*), from south California, and a note on the occurrence of *Phycis regius* in North Carolina. By Tarleton H. Bean. Pp. 69-70. July 8, 1880.

125. Description of a new species of *Sebastichthys (Sebastichthys miniatus)*, from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert. Pp. 70-73. July 8, 1880.

126. Description of a new species of "rock-fish" *(Sebastichthys carnatus)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 73-75. July 8, 1880.

127. Check-list of duplicates of North American fishes distributed by the Smithsonian Institution in behalf of the United States National Museum, 1877-1880. Prepared by Tarleton H. Bean. Pp. 75-96, July 8, 1880; pp. 97-116. July 10, 1880.

128. The littoral marine fauna of Provincetown, Cape Cod, Massachusetts. By Richard Rathbun. Pp. 116-128, July 10, 1880; pp. 129-133, 1880 (exact date of publication unknown).

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129. Description of a new species of ray *(Raia stellulata)* from Monterey, California. By David S. Jordan and Charles H. Gilbert. Pp. 133-135. 1880 (exact date of publication unknown).

130. Descriptions of new species of *Xiphister* and *Apodichthys,* from Monterey, California. By David S. Jordan and Charles H. Gilbert. Pp. 135-140. 1880 (exact date of publication unknown).

131. Description of a very large fossil gasteropod from the state of Puebla, Mexico. By C. A. White. Pp. 140-142. 1 pl. 1880 (exact date of publication unknown).

132. Description of two new species of *Sebastichthys (Sebastichthys entomelas* and *Sebastichthys rhodochloris),* from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert. Pp. 142-144, 1880 (exact date of publication unknown); pp. 145-146, July 8, 1880.

133. On the occurrence of a species of *Cremnobates* at San Diego, California. By Rosa Smith. Pp. 147-149. July 8, 1880.

134. On some new species of Eocene Mollusca from the southern United States. By Angelo Heilprin. Pp. 149-152, 1 pl. July 8, 1880.

135. Description of a new agonoid fish *(Brachyopsis xyosternus),* from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert. Pp. 152-154. July 8, 1880.

136. Description of a new flounder *(Hippoglossoides exilis),* from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 154-156. July 8, 1880.

137. Descriptions of new invertebrate fossils from the Mesozoic and Cenozoic rocks of Arkansas, Wyoming, Colorado, and Utah. By C. A. White. Pp. 157-160, July 8, 1880; pp. 161-162, Aug. 27, 1880.

138. A catalogue of the birds of North America. By Robert Ridgway. Pp. 163-208, Aug. 27, 1880; pp. 209-224, Sept. 9, 1880; pp. 225-246, Sept. 15, 1880.

139. On the identity of the genus *Leurynnis,* Lockington, with *Lycodopsis,* Collett. By Theodore Gill. Pp. 247-248. Sept. 15, 1880.

140. Description of a new chiroid fish, *Myriolepis zonifer,* from Monterey Bay, California. By W. N. Lockington. Pp. 248-251. Sept. 15, 1880.

141. Description of a new species of ray, *Raia rhina,* from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 251-253. Sept. 15, 1880.

142. Description of a new species of parrot of the genus *Chrysotis,* from the Island of Dominica. By George N. Lawrence. Pp. 254-256, Sept. 15, 1880; p. 257, Sept. 22, 1880.

143. The eulachon or candle-fish of the Northwest coast. By James G. Swan. Pp. 257-264. Sept. 22, 1880.

144. Description of two new species of fishes, *Ascelichthys rhodorus* and *Scytalina cerdale,* from Neah Bay, Washington Territory. By David S. Jordan and Charles H. Gilbert. Pp. 264-268. Sept. 22, 1880.

145. On *Camaraphysema,* a new type of sponge. By John A. Ryder. Pp. 269-272, 7 figs. Sept. 22, 1880.

146. Description of two new species of scopeloid fishes, *Sudis ringens* and *Myctophum crenulare,* from Santa Barbara Channel, California. By David S. Jordan and Charles H. Gilbert. Pp. 273-276. Oct. 2, 1880.

147. Description of two new species of flounders *(Parophrys ischyrus* and *Hippoglossoides elassodon),* from Puget's Sound. By David S. Jordan and Charles H. Gilbert. Pp. 276-280. Oct. 2, 1880.

148. On the genitalia of male eels and their sexual characters. By S. Th. Cattie. Pp. 280-284, 1 fig. Oct. 2, 1880.

149. Description of a new sparoid fish *(Sparus brachysomus),* from Lower California. By W. N. Lockington. Pp. 284-286. Oct. 2, 1880.

150. Description of seven new species of sebastoid fishes, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 287-298. Oct. 2, 1880.

151. Description of a new embiotocoid *(Abeona aurora),* from Monterey, California, with notes on a related species. By David S. Jordan and Charles H. Gilbert. Pp. 299-301. Oct. 2, 1880.

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152. Description of a new flounder *(Platysomatichthys stomias)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 301-303. Oct. 2, 1880.

153. Description of a new embiotocoid fish *(Cymatogaster rosaceus)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 303-304, Oct. 2, 1880; p. 305, Oct. 18, 1880.

154. Description of a new species of deep-water fish *(Icichthys lockingtoni)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 305-308. Oct. 18, 1880.

155. Catalogue of Trochilidae in the collection of the United States National Museum. By Robert Ridgway. Pp. 308-320. Oct. 18, 1880.

156. Description of a new embiotocoid fish *(Ditrema atripes)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. P. 320, Oct. 18, 1880; pp. 321-322, Nov. 2, 1880.

157. Description of a new scorpaenoid fish *(Sebastichthys maliger)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 322-324. Nov. 2, 1880.

158 Note on a new flat-fish (*Lepidopsetta isolepis*) found in the markets of San Francisco. By W. N. Lockington. P. 325. Nov. 2, 1880.

159. Note on a forgotten paper of Dr. Ayres and its bearing on the nomenclature of the cyprinoid fishes of the San Francisco markets. By David S. Jordan. Pp. 325-327. Nov. 2, 1880.

160. Note on *"Sema"* and *"Dacentrus."* By David S. Jordan. P. 327. Nov. 2, 1880.

161. Description of a new scorpaenoid fish *(Sebastichthys proriger)*, from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert. Pp. 327-329. Nov. 2, 1880.

162. Description of a new agonoid *(Agonus vulsus)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 330-332. Nov. 2, 1880.

163. List of species and varieties of minerals in the National Museum of the United States in 1879. By Fred. M. Endlich. Pp. 333-335. Nov. 2, 1880.

164. Description of a new species of *Hemirhamphus (Hemirhamphus rosae)*, from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 335-336. Nov. 2, 1880.

165. Descriptions of seven new species of fishes from deep soundings on the southern New England coast, with diagnoses of two undescribed genera of flounders and a genus related to *Merlucius*. By G. Brown Goode. Pp. 337-350. Dec. 30, 1880.

166. Description of a new species of *Icterus* from the West Indies. By George N. Lawrence. P. 351. Dec. 30, 1880.

167. Description of a new species of notidanoid shark *(Hexanchus corinus)*, from the Pacific coast of the United States. By David S. Jordan and Charles H. Gilbert. Pp. 352-355. Dec. 30, 1880.

168. Notice of recent additions to the marine Invertebrata, of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. Part II.—Mollusca, with notes on Annelida, Echinodermata, etc., collected by the United States Fish Commission. By A. E. Verrill. Pp. 356-384, Dec. 30, 1880; pp. 385-400, Jan. 10, 1881; pp. 401-405, Jan. 14, 1881.

169. [Notice of recent additions to the marine Invertebrata, of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others.] Part III.—Catalogue of Mollusca recently added to the fauna of southern New England. By A. E. Verrill. Pp. 405-409. Jan. 14, 1881.

170. Description of a new species of *Nemichthys (Nemichthys avocetta)*, from Puget Sound. By David S. Jordan and Charles H. Gilbert. Pp. 409-410. Jan. 14, 1881.

171. Description of a new species of *Paralepis (Paralepis coruscans)*, from the Straits of Juan de Fuca. By David S. Jordan and Charles H. Gilbert. Pp. 411-413. Jan. 14, 1881.

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172. Preliminary notice of the Crustacea dredged, in 64 to 325 fathoms, off the south coast of New England, by the United States Fish Commission in 1880. By S. I. Smith. Pp. 413-416, Jan. 14, 1881; pp. 417-432, Jan. 15, 1881; pp. 433-448, Jan. 17, 1881; pp. 449-452, Feb. 4, 1881.

173. List of fishes of the Pacific coast of the United States, with a table showing the distribution of the species. By David S. Jordan and Charles H. Gilbert. P. 452-458. Feb. 4, 1881.

174. On the generic relations of *Belone exilis* Girard. By David S. Jordan and Charles H. Gilbert. P. 459. Feb. 4, 1881.

175. Notes on a collection of fishes from Utah Lake. By David S. Jordan and Charles H. Gilbert. Pp. 459-464, Feb. 4, 1881; p. 465, Feb. 25, 1881.

176. Description of a new species of "rock-fish" *(Sebastichthys chrysomelas),* from the coast of California. By David S. Jordan and Charles H. Gilbert. Pp. 465-466. Feb. 25, 1881.

177. Fishes from the deep water on the south coast of New England and obtained by the United States Fish Commission in the summer of 1880. By G. Brown Goode. Pp. 467-480, Feb. 25, 1881; pp. 481-486, Feb. 23, 1881.

178. Description of a new species of *Caranx (Caranx beani),* from Beaufort, North Carolina. By David S. Jordan. Pp. 486-488. Feb. 23, 1881.

179. On a collection of fishes from eastern Mississippi. By O. P. Hay. Pp. 488-515. Feb. 23, 1881.

180. Synopsis and descriptions of the American Rhinobatidae. By Samuel Garman. Pp. 516-523. Feb. 23, 1881.

181. List of the North American species of myriapods belonging to the family of the Lysiopetalidae, with a description of a blind form from Luray Cave, Virginia. By John A. Ryder. Pp. 524-528, 3 figs., Feb. 23, 1881; p. 529, Apr. 28, 1881.

182. Description of a new species of *Prionotus* (*Prionotus stephanophrys*), from the coast of California. By W. N. Lockington. Pp. 529-532. Apr. 28, 1881.

183. The frigate mackerel, *Auxis rochei,* on the New England coast. By G. Brown Goode. Pp. 532-535. Apr. 28, 1881.

184. *Notacanthus phasganorus,* a new species of Notacanthidae from the Grand Banks of Newfoundland. By G. Brown Goode. Pp. 535-537. Apr. 28, 1881.

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Proceedings of the United States National Museum, vol. 4. Pp. i-v (title page and table of contents); pp. 1-475 (Proceedings papers 185-256); pp. 477-534 (index); 13 figs., 1 pl. (With Appendix, 146 pp., circulars 1-18, individually paged.) 1882.

185. Check-list of duplicates of fishes from the Pacific coast of North America, distributed by the Smithsonian Institution in behalf of the United States National Museum, 1881. Prepared by David S. Jordan and Pierre L. Jouy. Pp. 1-18. Apr. 22, 1881.

186. Description of a new species of *Squalius* (*Squalius aliciae*), from Utah Lake. By Pierre Louis Jouy. P. 19. Apr. 22, 1881.

187. Description of a new gobioid fish (*Athonops eos*), from San Diego, California. By Rosa Smith. Pp. 19-21. Apr. 22, 1881.

188. On a duck new to the North American fauna. By Robert Ridgway. Pp. 22-24. Apr. 22, 1881.

189. On *Amazilia yucatanesis* (Cabot) and *A. cerviniventris,* Gould. By Robert Ridgway. Pp. 25-26. Apr. 22, 1881.

190. Descriptions of new species of fishes (*Uranidea marginata, Potamocottus bendirei)* and of *Myctophum crenulare* J. and G. By Tarleton H. Bean. Pp. 26-29. Apr. 22, 1881.

191. Notes on the fishes of the Pacific coast of the United States. By David S. Jordan and Charles H. Gilbert. Pp. 29-48, Apr. 22, 1881; pp. 49-64, May 9, 1881; pp. 65-70, May 10, 1881.

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192. Description of *Sebastichthys mystinus*. By David S. Jordan and Charles H. Gilbert. Pp. 70-72. May 10, 1881.

193. Description of a new species of *Ptychochilus (Ptychochilus harfordi)*, from Sacramento River. By David S. Jordan and Charles H. Gilbert. Pp. 72-73. May 10, 1881.

194. Notes on *Raia inornata*. By David S. Jordan and Charles H. Gilbert. Pp. 73-74. May 10, 1881.

195. On the fish-mortality in the Gulf of Mexico. By Ernest Ingersoll. Pp. 74-80. May 10, 1881.

196. Notes on Salmonidae of the upper Columbia. By Charles Bendire. Pp. 81-87, 1 fig. July 18, 1881.

197. A review of the genera and species of the family Centrarchidae, with a description of one new species. By Charles L. McKay. Pp. 87-93. July 18, 1881.

198. A review of the genus *Centurus*, Swainson. By Robert Ridgway. Pp. 93-119. July 18, 1881.

199. Observations on *Siredon lichenoides*. By Wm. E. Carlin. Pp. 120-121. July 18, 1881.

200. On the destruction of fish by poisonous water in the Gulf of Mexico. By Joseph Y. Porter. Pp. 121-123. July 18, 1881.

201. An analysis of water destructive to fish in the Gulf of Mexico. By F. M. Endlich. P. 124. July 18, 1881.

202. Fish mortality in the Gulf of Mexico. By M. A. Moore. Pp. 125-126. July 18, 1881.

203. On the destruction of fish by polluted waters in the Gulf of Mexico. By W. C. W. Glazier. Pp. 126-127. July 18, 1881.

204. Notes on some fishes from Hudson's Bay. By Tarleton H. Bean. Pp. 127-129. July 18, 1881.

205. On the mineralogical composition of the normal Mesozoic diabase upon the Atlantic border. By George W. Hawes. Pp. 129-134. July 18, 1881.

206. On the determination of feldspar in thin sections of rocks. By George W. Hawes. Pp. 134-136. July 18, 1881.

207. On certain Cretaceous fossils from Arkansas and Colorado. By C. A. White. Pp. 136-139, 1 pl. July 18, 1881.

208. Description of a new species of *Gobiesox (Gobiesox rhessodon)* from San Diego, California. By Rosa Smith. Pp. 140-141. July 18, 1881.

209. Description of a new genus and species of Cittidae. By W. N. Lockington. Pp. 141-144. July 18, 1881.

210. Descriptions of new fishes from Alaska and Siberia. By Tarleton H. Bean. Pp. 144-159. July 18, 1881.

211. Description of a new species of fish, *Apogon pandionis*, from the deep water off the mouth of Chesapeake Bay. By G. Brown Goode and Tarleton H. Bean. P. 160, July 18, 1881; p. 161, Aug. 20, 1881.

212. Metallic castings of delicate natural objects. [Translated.] P. 161. Aug. 20, 1881.

213. The occurrence of the Canada porcupine in Maryland. By Otto Lugger. Pp. 161-162. Aug. 20, 1881.

214. Note on the latiloid genera. By Theodore Gill. Pp. 162-164. Aug. 20, 1881.

215. List of species of Middle and South American birds not contained in the United States National Museum. By Robert Ridgway. Pp. 165-192, Aug. 20, 1881; pp. 193-203, Nov. 25, 1881.

216. Description of a new sub-species of *Loxigilla* from the Island of St. Christopher, West Indies. By George N. Lawrence. Pp. 204-205. Nov. 25, 1881.

217. Notes on the mortality among fishes of the Gulf of Mexico. By S. H. Johnson. P. 205. Nov. 25, 1881.

218. The comparative action of dry heat and sulphurous acid upon putrefactive bacteria. [Based on experiments by Dr. Wermeh.] P. 206. Nov. 25, 1881.

219. List of special desiderata among North American birds. By Robert Ridgway. Pp. 207-208, Nov. 25, 1881; pp. 209-223, Dec. 8, 1881.

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220. On Semper's method of making dry preparations. [Abstract, with remarks by J. A. Ryder.] P. 224, Dec. 8, 1881; p. 225, Jan. 4, 1882.

221. Notes on a collection of fishes, made by Lieut. Henry E. Nichols, U.S.N., on the west coast of Mexico, with descriptions of new species. By David S. Jordan and Charles H. Gilbert. Pp. 225-233. Jan. 4, 1882.

222. Report on the contents of two bottles of water from the Gulf of Mexico, forwarded by the Smithsonian Institution. By W. G. Farlow. P. 234. Jan. 4, 1882.

223. Remains of the walrus (?) in Maine. By C. H. Boyd. Pp. 234-235. Jan. 4, 1882.

224. Directions for collecting and preserving fish. By Tarleton H. Bean. Pp. 235-238. Jan. 4, 1882.

225. A preliminary catalogue of the fishes of Alaskan and adjacent waters. By Tarleton H. Bean. Pp. 239-240, Jan. 4, 1882; pp. 241-256, Jan. 9, 1882; pp. 257-272, Jan. 4, 1882.

226. Methods of making and preserving plaster casts. By Anthony Pirz. P. 272, Jan. 4, 1882; p. 273, Feb. 1, 1882.

227. List of fishes collected by Lieut. Henry E. Nichols, U.S.N., in the Gulf of California and on the west coast of Lower California, with descriptions of four new species. By David S. Jordan and Charles H. Gilbert. Pp. 273-279. Feb. 1, 1882.

228. On the genera of chitons. By W. H. Dall. Pp. 279-288, Feb. 1, 1882; pp. 289-291, Mar. 13, 1882.

229. Notes on certain aboriginal shell mounds on the coast of New Brunswick and of New England. By S. F. Baird. Pp. 292-297. Mar. 13, 1882.

230. List of marine invertebrates, mainly from the New England coast, distributed by the United States National Museum. Series II. Prepared by Richard Rathbun. Pp. 298-303. Mar. 13, 1882.

231. List of marine invertebrates from the New England coast, distributed by the United States National Museum. Series III.—Educational Series. Prepared by Richard Rathbun. P. 304, Mar. 13, 1882; pp. 305-307, Mar. 15, 1882.

232. Catalogue of a collection of Japanese woods presented to the United States National Museum by the University of Tokio, Japan. [Prepared by Lester F. Ward.] Pp. 308-311. Mar. 15, 1882.

233. A partial bibliography of the fishes of the Pacific coast of the United States and of Alaska, for the year 1880. By Tarleton H. Bean. Pp. 312-317. Mar. 15, 1882.

234. Catalogue of Old World birds in the United States National Museum. By Robert Ridgway. Pp. 317-320, Mar. 15, 1882; pp. 321-333, Mar. 16, 1882.

235. Notes on some Costa Rican birds. By Robert Ridgway. Pp. 333-336, Mar. 16, 1882; p. 337, Apr. 6, 1882.

236. Description of a new fly-catcher and a supposed new petrel from the Sandwich Islands. By Robert Ridgway. Pp. 337-338. Apr. 6, 1882.

237. Descriptions of thirty-three new species of fishes from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert. Pp. 338-365. Apr. 6, 1882.

238. Description of a new owl from Porto Rico. By Robert Ridgway. Pp. 366-368, Apr. 6, 1882; pp. 369-371, Apr. 13, 1882.

239. Description of two new races of *Myadestes obscurus* Lafr. By Leonhard Stejneger. Pp. 371-374. Apr. 13, 1882.

240. Descriptions of two new thrushes from the United States. By Robert Ridgway. Pp. 374-379. Apr. 13, 1882.

241. *Benthodesmus*, a new genus of deep-sea fishes, allied to *Lepidopus*. By G. Brown Goode and Tarleton H. Bean. Pp. 379-383. Apr. 13, 1882.

242. Description of a new species of *Pomadasys* from Mazatlan, with a key to the species known to inhabit the Pacific coasts of tropical America. By David S. Jordan and Charles H. Gilbert. Pp. 383-384, Apr. 13, 1882; pp. 385-388, Apr. 25, 1882.

243. The rapid preparation of large myological specimens. By Félix Plateau. Pp. 388-391. Apr. 25, 1882.

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244. On the Chinnook names of the salmon in the Columbia River. By Silas B. Smith. Pp. 391-392. Apr. 25, 1882.

245. Remarks upon the osteology of *Opheosaurus ventralis*. By R. W. Shufeldt. Pp. 392-400, 9 figs. Apr. 25, 1882.

246. On certain limpets and chitons from the deep waters off the eastern coast of the United States. By W. H. Dall. P. 400, Apr. 25, 1882; pp. 401-414, May 5, 1882.

247. On two recent additions to the North American bird fauna, by L. Belding. By Robert Ridgway. Pp. 414-415. May 5, 1882.

248. The taxonomic relations and geographical distribution of the members of the sword-fish family, Xiphiidae. By G. Brown Goode. Pp. 315-416, May 5, 1882; pp. 417-432, May 10, 1882; p. 433, May 18, 1882.

249. On the North American land tortoises of the genus *Xerobates*. By Frederick W. True. Pp. 434-448, May 18, 1882; p. 449, 3 figs., 1882 (exact date of publication unknown).

250. Catalogue of a collection of Japanese cotton fiber presented to the United States National Museum by the Government of Japan, together with the amount of the annual crop of Japan and the price of cotton. [Prepared by the Japanese Legation.] Pp. 449-452. 1882 (exact date of publication unknown).

251. Brief account of cotton husbandry. [Prepared by the Japanese Legation.] Pp. 452-453. 1882 (exact date of publication unknown).

252. Description of a new species of *Xenichthys (Xenichthys xenurus)* from the west coast of Central America. By David S. Jordan and Charles H. Gilbert. P. 454. 1882 (exact date of publication unknown).

253. List of anthropological publications of Charles Rau. 1859-1882. Pp. 455-458. 1882 (exact date of publication unknown).

254. Description of five new species of fishes from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert. Pp. 458-463. 1882 (exact date of publication unknown).

255. Notes on a collection of fishes made by Captain Henry E. Nichols, U.S.N., in British Columbia and southern Alaska, with descriptions of new species and a new genus *(Delolepis)*. By Tarleton H. Bean. Pp. 463-464, 1882 (exact date of publication unknown); pp. 465-474, Aug. 16, 1882.

256. On the rare rodent, *Cricetodipus parvus* (Baird) Coues. By Frederick W. True. Pp. 474-475. Aug. 16, 1882.

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Proceedings of the United States National Museum, vol. 5. Pp. i-xi (title page, advertisement, table of contents, list of illustrations, and list of corrections); pp. 1-663 (Proceedings papers 257-342); pp. 665-703 (index); 52 figs., 12 pls. 1883.

257. Information concerning some fossil trees in the United States National Museum. P. T. Swaine and J. T. C. Hegewald. Pp. 1-3. June 14, 1882.

258. A study of the Phronimidae of the North Pacific Surveying Expedition. By Thos. H. Streets. Pp. 3-9, 1 pl. June 14, 1882.

259. Description of several new races of American birds. By Robert Ridgway. Pp. 9-15. June 14, 1882.

260. Synopsis of the West Indian *Myadestes*. By Leonhard Stejneger. Pp. 15-16, June 14, 1882; pp. 17-27, 1 pl., June 12, 1882.

261. On some generic and specific appellations of North American and European birds. By Leonhard Stejneger. Pp. 28-32, June 12, 1882; pp. 33-43, June 13, 1882.

262. On the genera *Harporhynchus*, Cabanis, and *Methriopterus*, Reichenbach, with a description of a new genus of Miminae. Pp. 43-46. June 13, 1882.

263. On a phosphatic sandstone from Hawthorne, in Florida. By George W. Hawes. Pp. 46-48. June 13, 1882.

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264. Notes on the native trees of the lower Wabash and White River Valleys, in Illinois and Indiana. By Robert Ridgway. Pp. 49-88. June 24, 1882.

265. Notes on fishes collected by Capt. Chas. Bendire, U. S. A., in Washington Territory and Oregon, May to October, 1881. By Tarleton H. Bean. Pp. 89-93. June 24, 1882.

266. New molluscan forms from the Laramie and Green River groups, with discussion of some associated forms heretofore known. By C. A. White. Pp. 94-96, June 24, 1882; pp. 97-99, 2 pls., July 3, 1882.

267. The molluscan fauna of the Truckee group, including a new form. By C. A. White. Pp. 99-102, 1 pl. July 3, 1882.

268. Description of four new species of sharks, from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert. Pp. 102-110. July 3, 1882.

269. Description of a new shark *(Carcharias lamiella)* from San Diego, California. By David S. Jordan and Charles H. Gilbert. Pp. 110-111. July 3, 1882.

270. Critical remarks on the tree-creepers *(Certhia)* of Europe and North America. By Robert Ridgway. Pp. 111-112, July 3, 1882; pp. 113-116, July 21, 1882.

271. Note on the occurrence of a silver lamprey, *Ichthyomyzon castaneus,* Girard, in Louisiana. By Tarleton H. Bean. Pp. 117-119. July 21, 1882.

272. Notes on a collection of fishes from Johnston's Island, including descriptions of five new species. By Rosa Smith and Joseph Swain. Pp. 119-143. July 21, 1882.

273. Description of a new cyprinodont *(Zygonectes inurus),* from southern Illinois. By David S. Jordan and Charles H. Gilbert. Pp. 143-144. July 21, 1882.

274. Notes on birds collected during the summer of 1880 in Alaska and Siberia. By Tarleton H. Bean. Pp. 144-160, July 21, 1882; pp. 161-173, Aug. 5, 1882.

275. Outlines of a monograph of the Cygninae. By Leonhard Stejneger. Pp. 174-221. Aug. 5, 1882.

276. Note on the habits and the rearing of the axolotl, *Amblystoma mexicanum* By M. Carbonnier. Pp. 221-222. Aug. 5, 1882.

277. Description of a new species of *Uranidea (Uranidea pollicaris)* from Lake Michigan. By David S. Jordan and Charles H. Gilbert. Pp. 222-223. Aug. 5, 1882.

278. Observations on four mules in milk. Alfred Dugès. Pp. 223-225. Aug. 5, 1882.

279. On *Lagopus mutus,* Leach, and its allies. By Lucien M. Turner. Pp. 225-233. Aug. 5, 1882.

280. Genera of the Scolopendrellidae. By J. A. Ryder. P. 234. Aug. 5, 1882.

281. A list of the species of fishes recorded as occurring in the Gulf of Mexico. By G. Brown Goode and Tarleton H. Bean. Pp. 234-240. Aug. 5, 1882.

282. Notes on fishes observed about Pensacola, Florida, and Galveston, Texas, with description of new species. By David S. Jordan and Charles H. Gilbert. Pp. 241-272, Aug. 16, 1882; pp. 273-307, Aug. 22, 1882.

283. A review of the Syngnathinae of the United States, with a description of one new species. By Joseph Swain. Pp. 307-315. Aug. 22, 1882.

284. Notice of recent additions to the marine invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. Part IV.—Additions to the deep-water Mollusca, taken off Martha's Vineyard, in 1880 and 1881. By A. E. Verrill. Pp. 315-320, Aug. 22, 1881; pp. 321-336, Sept. 16, 1882; pp. 337-343, Sept. 11, 1882.

285. Descriptions of some new North American birds. By Robert Ridgway. Pp. 343-346. Sept. 11, 1882.

286. Description of a new species of *Uranidea (Uranidea rhothea)* from Spokane River, Washington Territory. By Rosa Smith. Pp. 347-348. Sept. 11, 1882.

287. On the eastward distribution of the black-tailed deer *(Cariacus columbianus).* By Chas. Bendire. Pp. 348-349. Sept. 11, 1882.

288. Description of a new species of blenny (*Isesthes gilberti*) from Santa Barbara, California. By David S. Jordan. Pp. 349-351. Sept. 11, 1882.

289. Description of a new species of *Conodon* (*Conodon serrifer*), from Boca Soledad, Lower California. By David S. Jordan and Charles H. Gilbert. Pp. 351-352. Sept. 11, 1882.

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290. Catalogue of the fishes collected by Mr. John Xantus at Cape San Lucas, which are now in the United States National Museum, with descriptions of eight new species. By David S. Jordan and Charles H. Gilbert. Pp. 353-371. Sept. 16, 1882.

291. List of fishes collected by John Xantus at Colima, Mexico. By David S. Jordan and Charles H. Gilbert. Pp. 371-372. Sept. 16, 1882.

292. List of fishes collected at Panama by Captain John M. Dow, now in the United States National Museum. By David S. Jordan and Charles H. Gilbert. Pp. 373-378. Sept. 16, 1882.

293. List of a collection of fishes made by Mr. L. Belding near Cape San Lucas, Lower California. By David S. Jordan and Charles H. Gilbert. Pp. 378-381. Sept. 16, 1882.

294. List of fishes collected at Panama, by Rev. Mr. Rowell, now preserved in the United States National Museum. By David S. Jordan and Charles H. Gilbert. Pp. 381-382. Sept. 16, 1882.

295. On a collection of birds from the Hacienda "La Palma," Gulf of Nicoya, Costa Rica. By C. C. Nutting. (With critical notes by R. Ridgway.) Pp. 382-409. Sept. 16, 1882.

296. Description of two new species of fishes *(Sebastichthys umbrosus* and *Citharichthys stigmaeus)* collected at Santa Barbara, California, by Andrea Larco. By David S. Jordan and Charles H. Gilbert. Pp. 410-412. Sept. 16, 1882.

297. Descriptions of twenty-five new species of fish from the southern United States, and three new genera, *Letharcus, Ioglossus,* and *Chriodorus.* By G. Brown Goode and Tarleton H. Bean. Pp. 412-416, Sept. 16, 1882; pp. 417-437, Nov. 11, 1882.

298. Description of a new species of goby (*Gobiosoma ios*) from Vancouver's Island. By David S. Jordan and Charles H. Gilbert. Pp. 437-438. Nov. 11, 1882.

299. Descriptions of new species of reptiles and amphibians in the United States National Museum. By H. C. Yarrow. Pp. 438-443. Nov. 11, 1882.

300. Contribution to the Miocene flora of Alaska. By L. Lesquereux. Pp. 443-448, Nov. 11, 1882; p. 449, 5 pls., Feb. 23, 1883.

301. Remarks on the systematic arrangement of the American Turdidae. By Leonhard Stejneger. Pp. 449-480, Feb. 23, 1883; pp. 481-483, 33 figs., Mar. 5, 1883.

302. On the family Centropomidae. By Theodore Gill. Pp. 484-485, 1 pl. Mar. 5, 1883.

303. Nomenclature of the xiphiids. By Theodore Gill. Pp. 485-486. Mar. 5, 1883.

304. On the family and subfamilies of Carangidae. By Theodore Gill. Pp. 487-493. Mar. 5, 1883.

305. Catalogue of a collection of birds made in the interior of Costa Rica by Mr. C. C. Nutting. By Robert Ridgway. Pp. 493-502. Mar. 5, 1883.

306. Brief descriptions of fossil plants, chiefly Tertiary, from western North America. By J. S. Newberry. Pp. 502-512, Mar. 5, 1883; pp. 513-514, Apr. 3, 1883.

307. Note on the leptocardians. By Theodore Gill. Pp. 515-516. Apr. 3, 1883.

308. Note on the myzonts or marsipobranchiates. By Theodore Gill. Pp. 516-517. Apr. 3, 1883.

309. Note on the Bdellostomidae and Myxinidae. By Theodore Gill. Pp. 517-520. Apr. 3, 1883.

310. Note on the petromyzontids. By Theodore Gill. Pp. 521-525. Apr. 3, 1883.

311. Description of a new warbler from the Island of Santa Lucia, West Indies. By Robert Ridgway. Pp. 525-526. Apr. 3, 1883.

312. Description of a supposed new plover from Chili. By Robert Ridgway. Pp. 526-527. Apr. 3, 1883.

313. Catalogue of a collection of birds made at various points along the western coast of Lower California, north of Cape St. Eugenio. By L. Belding. [Edited by R. Ridgway.] Pp. 527-532. Apr. 3, 1883.

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314. Catalogue of a collection of birds made near the southern extremity of the peninsula of Lower California. By L. Belding. [Edited by R. Ridgway.] Pp. 532-550. Apr. 3, 1883.

315. On the genus *Tantalus,* Linn., and its allies. By Robert Ridgway. Pp. 550-551. Apr. 3, 1883.

316. Supplementary note on the Pediculati. By Theodore Gill. Pp. 551-556. Apr. 3, 1883.

317. Note on the Pomatomidae. By Theodore Gill. P. 557. Apr. 3, 1883.

318. Note on the affinities of the ephippiids. By Theodore Gill. Pp. 557-560. Apr. 3, 1883.

319. On the relations of the family Lobotidae. By Theodore Gill. Pp. 560-561. Apr. 3, 1883.

320. Note on the relationships of the echeneidids. By Theodore Gill. Pp. 561-566, 1 pl. Apr. 3, 1883.

321. Note on the genus *Sparus.* By Theodore Gill. Pp. 566-567. Apr. 3, 1883.

322. On the proper name of the blue fish. By Theodore Gill. Pp. 567-570. Apr. 3, 1883.

323. Does the panther *(Felis concolor)* go into the water to kill fish? By Livingston Stone. P. 570. Apr. 3, 1883.

324. On certain neglected generic names of La Cépède. By David S. Jordan and Charles H. Gilbert. Pp. 570-576. Apr. 3, 1883.

325. On the synonymy of the genus *Bothus* Rafinesque. By David S. Jordan and Charles H. Gilbert. P. 576, Apr. 3, 1883; p. 577, Apr. 28, 1883.

326. Description of a new species of *Artedius (Artedius fenestralis)* from Puget Sound. By David S. Jordan and Charles H. Gilbert. Pp. 577-579. Apr. 28, 1883.

327. Description of a new species of *Urolophus (Urolophus asterias),* from Mazatlan and Panama. By David S. Jordan and Charles H. Gilbert. Pp. 579-580. Apr. 28, 1883.

328. Notes on a collection of fishes from Charleston, South Carolina, with descriptions of three new species. By David S. Jordan and Charles H. Gilbert. Pp. 580-592, Apr. 28, 1883; pp. 593-620, May 22, 1883.

329. List of fishes now in the museum of Yale College, collected by Prof. Frank H. Bradley, at Panama, with descriptions of three new species. By David S. Jordan and Charles H. Gilbert. Pp. 620-624, May 22, 1883; pp. 625-632, May 29, 1883.

330. Jumping seeds and galls. By Charles V. Riley. Pp. 632-635, 1 fig. May 29, 1883.

331. Note on cluster flies. By W. H. Dall. Pp. 635-637. May 29, 1883.

332. A review of the genus *Noturus,* with a description of one new species. By Joseph Swain and George B. Kalb. Pp. 638-644. May 29, 1883.

333. Catalogue of a collection of samples of raw cotton presented to the United States National Museum by the International Cotton Exposition, Atlanta, Georgia, 1881. By S. M. Inman. Pp. 644-645. May 29, 1883.

334. Description of two new species of fishes *(Myrophis vafer* and *Chloroscombrus orqueta)* from Panama. By David S. Jordan and Charles H. Gilbert. Pp. 645-647. May 29, 1883.

335. Description of a new eel *(Sidera castanea)* from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert. Pp. 647-648. May 29, 1883.

336. On the nomenclature of the genus *Ophichthys.* By David S. Jordan and Charles H. Gilbert. Pp. 648-651. May 29, 1883.

337. On the life coloration of the young of *Pomacentrus rubicundus.* By Rosa Smith. Pp. 652-653. May 29, 1883.

338. On a cinnamon bear from Pennsylvania. By Frederick W. True. Pp. 653-656. May 29, 1883.

339. Description of a new petrel from Alaska. By Robert Ridgway. P. 656, May 29, 1883; pp. 657-658, June 30, 1883.

340. Description of a species of whitefish, *Coregonus hoyi* (Gill) Jordan, called "smelt" in some parts of New York. By Tarleton H. Bean. Pp. 658-660. June 30, 1883.

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341. Note on a Potsdam sandstone, or conglomerate, from Berks County, Pennsylvania. By George P. Merrill. Pp. 660-661. June 30, 1883.

342. Description of a new species of *Alepidosaurus* (*A. aesculapius*) from Alaska. By Tarleton H. Bean. Pp. 661-663. June 30, 1883.

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Proceedings of the United States National Museum, vol. 6. Pp. i-vii (title page, advertisement, table of contents, list of illustrations, and list of corrections); pp. 1-429 (Proceedings papers 343-396); pp. 431-497, (circulars 19-23); pp. 499-530 (index); pp. 532-558 (explanation of plates); 6 figs., 14 pls. 1884.

343. Preliminary report on the Brachyura and Anomura dredged in deep water off the south coast of New England by the United States Fish Commission in 1880, 1881, and 1882. By Sidney I. Smith. Pp. 1-57, 6 pls. June 30, 1883.

344. Contributions to the history of the Commander Islands. No. 1.—Notes on the natural history, including descriptions of new cetaceans. By Leonhard Stejneger. Pp. 58-80, June 30, 1883; pp. 81-89, Aug. 2, 1883.

345. Descriptions of some birds supposed to be undescribed, from the Commander Islands and Petropaulovski, collected by Dr. Leonhard Stejneger, U. S. Signal Service. By Robert Ridgway. Pp. 90-96. Aug. 2, 1883.

346. Description of a new genus and species of alcyonoid polyp, from Japanese waters, with remarks on the structure and habits of related forms, etc. By Robert E. C. Stearns. Pp. 96-101, 1 pl. Aug. 2, 1883.

347. Report on a fragment of cloth taken from a mound in Ohio. By J. G. Hunt. Pp. 101-102. Aug. 2, 1883.

348. *Lucilia macellaria* infesting man. By Fred. Humbert. Pp. 103-105. Aug. 2, 1883.

349. Fish mortality in the Gulf of Mexico. By S. T. Walker. Pp. 105-109. Aug. 2, 1883.

350. The generic names *Amitra* and *Thyris* replaced. By G. Brown Goode. P. 109. Aug. 2, 1883.

351. Shell beds in Westchester, N. Y. By Merritt Willis. P. 109. Aug. 2, 1883.

352. Notes on the nomenclature of certain North American fishes. By David S. Jordan and Charles H. Gilbert. Pp. 110-111. Aug. 2, 1883.

353. Notes on the natural history of Labrador. By W. A. Stearns. Pp. 111-112, Aug. 2, 1883; pp. 113-128, Aug. 8, 1883; pp. 129-137, Sept. 27, 1883.

354. On the black nodules or so-called inclusions in the Maine granites. By George P. Merrill. Pp. 137-141. Sept. 27, 1883.

355. Description of two new species of fishes (*Aprion ariommus* and *Ophidium beani*) from Pensacola, Florida. By David S. Jordan and Charles H. Gilbert. Pp. 142-144. Sept. 27, 1883.

356. On the probable identity of *Motacilla ocularis* Swinhoe and *M. amurensis* Seebohm, with remarks on an allied supposed species, *M. blakistoni* Seebohm. P. 144, Sept. 27, 1883; pp. 145-147, Oct. 11, 1883.

357. The first occurrence of *Pseudotriacis microdon*, Capello, on the coast of the United States. By Tarleton H. Bean. Pp. 147-150. Oct. 11, 1883.

358. On a pair of abnormal antlers of the Virginia deer. By Frederick W. True. P. 151, 1 fig. Oct. 11, 1883.

359. Description of a new species of reptiles in the United States National Museum. By H. C. Yarrow. Pp. 152-154. Oct. 11, 1883.

360. Descriptions of some new birds from Lower California, collected by Mr. L. Belding. By Robert Ridgway. Pp. 154-156. Oct. 11, 1883.

361. *Anthus cervinus* (Pallas) in Lower California. By Robert Ridgway. Pp. 156-157. Oct. 11, 1883.

362. Note on *Merula confinis* (Baird) By Robert Ridgway. Pp. 158-159. Oct. 11, 1883.

363. Preliminary note on the crystalline schists of the District of Columbia. By George P. Merrill. Pp. 159-160, Oct. 11, 1883; p. 161, Oct. 12, 1883.

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364. Catalogue of a collection of ethnological specimens obtained from the Ugashagmut tribe, Ugashak River, Bristol Bay, Alaska. By William J. Fisher. Pp. 161-165. Oct. 12, 1883.

365. On the collection of Maine building stones in the United States National Museum. By George P. Merrill. Pp. 165-176, Oct. 12, 1883; pp. 177-183, Oct. 11, 1883.

366. On the *Macrocheilus* of Phillips, *Plectostylus* of Conrad, and *Soleniscus* of Meek & Worthen. By Charles A. White. Pp. 184-187, 1 pl. Oct. 11, 1883.

367. A review of the American Caranginae. By David S. Jordan and Charles H. Gilbert. Pp. 188-192, Oct. 11, 1883; pp. 193-207, Oct. 12, 1883.

368. Note on the genera of Petromyzontidae. By David S. Jordan and Charles H. Gilbert. P. 208. Oct. 12, 1883.

369. Description of a new muraenoid eel *(Sidera chlevastes)* from the Galapagos Islands. By David S. Jordan and Charles H. Gilbert. Pp. 208-210. Oct. 12, 1883.

370. Description of a new species of *Rhinobatus (Rhinobatus glaucostigma)* from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert. Pp. 210-211. Oct. 12, 1883.

371. List of duplicate marine invertebrates distributed by the United States National Museum. Series IV.—Educational Series No. 2. Prepared by R. S. Tarr. Pp. 212-216. Oct. 12, 1883.

372. The life colors of *Cremnobates integripinnis*. By Rosa Smith. Pp. 216-217. Oct. 12, 1883.

373. Note on the occurrence of *Gasterosteus williamsoni* Grd., in an artesian well at San Bernardino, Cal. By Rosa Smith. P. 217. Oct. 12, 1883.

374. List of the Crustacea dredged on the coast of Labrador by the expedition under the direction of W. A. Stearns, in 1882. By Sidney I. Smith. Pp. 218-222. Oct. 12, 1883.

375. Review of the marine Crustacea of Labrador. By Sidney I. Smith. Pp. 223-224, Oct. 12, 1883; pp. 225-232, Nov. 3, 1883.

376. Notes on the fishes of Todos Santos Bay, Lower California. By Rosa Smith. Pp. 232-236. Nov. 3, 1883.

377. Catalogue of Mollusca and Echinodermata dredged on the coast of Labrador by the expedition under the direction of Mr. W. A. Stearns, in 1882. By Katherine J. Bush. Pp. 236-240, Nov. 3, 1883; pp. 241-247, 1 pl., Dec. 5, 1883.

378. List of fishes collected in the Clear Fork of the Cumberland, Whitley County, Kentucky, with descriptions of three new species. By David S. Jordan and Joseph Swain. Pp. 248-251. Dec. 5, 1883.

379. A description of a new species of *Hadropterus (Hadropterus scierus)* from southern Indiana. By Joseph Swain. P. 252. Dec. 5, 1883.

380. Diagnosis of new genera and species of deep-sea fishlike vertebrates. By Theodore Gill. Pp. 253-260. Dec. 5, 1883.

381. Diagnoses of new genera of nemichthyoid eels. By Theodore Gill and John A. Ryder. Pp. 260-262. Dec. 5, 1883.

382. On the anatomy and relations of the Eurypharyngidae. By Theodore Gill and John A. Ryder. Pp. 262-272, Dec. 5, 1883; p. 273, Dec. 20, 1883.

383. Ornithological notes on collections made in Japan from June to December, 1882. By Pierre Louis Jouy. Pp. 273-288, Dec. 20, 1883; pp. 289-304, Dec. 26, 1883; pp. 305-318, Jan. 4, 1884.

384. On a collection of shells sent from Florida by Mr. Henry Hemphill. By W. H. Dall. Pp. 318-320, Jan. 4, 1884; pp. 321-342, 1 pl., Jan. 9, 1884.

385. List of birds found at Guaymas, Sonora, in December, 1882, and April, 1883. By L. Belding. Pp. 343-344. Jan. 9, 1884.

386. Second catalogue of a collection of birds made near the southern extremity of Lower California. By L. Belding. [Edited by R. Ridgway.] Pp. 344-352. Jan. 9, 1884.

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387. Notes on a collection of fishes made in 1882 and 1883 by Capt. Henry E. Nichols, U.S.N., in Alaska and British Columbia, with a description of a new genus and species, *Prionistius macellus*. By Tarleton H. Bean. Pp. 353-361. Jan. 18, 1884.

388. Notes on some fishes collected by James G. Swan in Washington Territory, including a new species of *Macrurus*. By Tarleton H. Bean. Pp. 362-364. Jan. 18, 1884.

389. Notes on fishes observed at the head of Chesapeake Bay in the spring of 1882; and upon other species of the same region. By Tarleton H. Bean. Pp. 365-367. Jan. 18, 1884.

390. Notes on some Japanese birds related to North American species. By Robert Ridgway. P. 368, Jan. 18, 1884; pp. 369-371, Apr. 23, 1884.

391. On a collection of birds from Nicaragua. By Charles C. Nutting. [Edited by R. Ridgway.] Pp. 372-384, Apr. 23, 1884; pp. 385-410, Apr. 26, 1884.

392. On some Costa Rican birds, with descriptions of several supposed new species. By Robert Ridgway. Pp. 410-415. Apr. 26, 1884.

393. On an antique Roman mosaic from Carthage, now in the United States National Museum. By G. H. Heap. Pp. 415-416, Apr. 26, 1884; p. 417, May 22, 1884.

394. On the skeleton of *Phoca (Histriophoca) fasciata*, Zimmerman. By Frederick W. True. Pp. 417-426, 1 fig., 4 pls. May 22, 1884.

395. On the source of the jadeite implements of the Alaskan Innuits. By E. W. Nelson. Pp. 426-427. May 22, 1884.

396. On the origin of the fossil bones discovered in the vicinity of Tise's Ford, Florida. By S. T. Walker. Pp. 427-429. May 22, 1884.

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Proceedings of the United States National Museum, vol. 7. Pp. i-viii (title page, advertisement, table of contents, list of illustrations, and list of corrections); pp. 1-553 (Proceedings papers 397-469); pp. 555-624 (Appendix, circulars 23-31); pp. 625-661 (index); 15 figs., 2 pls. 1885.

397. List of, and notes upon, the lichens collected by Dr. T. H. Bean in Alaska and the adjacent region in 1880. By J. T. Rothrock. Pp. 1-9. July 8, 1884.

398. On the chlorophylloid granules of *Vorticella*. By John A. Ryder. Pp. 9-12, 1 fig. July 8, 1884.

399. A new geographical race of the mountain sheep *(Ovis montana dalli* var. nov.) from Alaska. By E. W. Nelson. Pp. 12-13. July 8, 1884.

400. Note on *Selasphorus torridus* Salvin. By Robert Ridgway. P. 14. July 8, 1884.

401. A review of the species of the genus *Calamus*. By David S. Jordan and Charles H. Gilbert. Pp. 14-24. July 8, 1884.

402. Descriptions of ten new species of fishes from Key West, Florida. By David S. Jordan and Charles H. Gilbert. Pp. 24-32. July 8, 1884.

403. Note on *Caranx ruber* and *Caranx bartholomaei*. By David S. Jordan and Charles H. Gilbert. Pp. 32-33. July 8, 1884.

404. Notes on a collection of fishes from Pensacola, Florida, obtained by Silas Stearns, with descriptions of two species (*Exocoetus volador* and *Gnathypops mystacinus*). By David S. Jordan. Pp. 33-40. July 8, 1884.

405. Note on *Aelurichthys eydouxii* and *Porichthys porosissimus*. By David S. Jordan. Pp. 40-41. July 8, 1884.

406. Notes on some Florida fishes. By G. Brown Goode and Tarleton H. Bean. Pp. 42-47. July 8, 1884.

407. Description of a new species of whitefish *(Coregonus nelsonii)*, from Alaska. By Tarleton H. Bean. P. 48. July 8, 1884.

408. On the literature and systematic relations of the saccopharyngoid fishes. By Theodore Gill and John A. Ryder. Pp. 48-64, July 8, 1884; p. 65, July 25, 1884.

409. On domesticated hybrid ducks *(Anas boschas* + *obscura)*. By Elisha Slade. P. 66. July 25, 1884.

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410. On prochlorite from the District of Columbia. By George P. Merrill. P. 67. July 25, 1884.

411. *Melanetta fusca* (Linn.) in Alaska. By Robert Ridgway. P. 68. July 25, 1884.

412. Description of a new snow bunting from Alaska. By Robert Ridgway. Pp. 68-70. July 25, 1884.

413. On the use of trinominals in American ornithology. By Leonhard Stejneger. Pp. 70-81. July 25, 1884.

414. Descriptions of scaroid fishes from Havana and Key West, including five new species. By David S. Jordan and Joseph Swain. Pp. 81-102. July 25, 1884.

415. Description of a new species of *Sphaerium*. By Temple Prime. Pp. 102-103. July 25, 1884.

416. List of fishes collected at Key West, Florida, with notes and descriptions. By David S. Jordan. Pp. 103-144, July 25, 1884; pp. 145-150, Sept. 1, 1884.

417. Note on *Calamus proridens*, a new species of *Calamus*. By David S. Jordan and Charles H. Gilbert. P. 150. Sept. 1, 1884.

418. A catalogue of fishes received from the Public Museum of the Institute of Jamaica, with descriptions of *Pomadasys approximans* and *Tylosurus euryops*, two new species. By Tarleton H. Bean and H. G. Dresel. Pp. 151-170. Sept. 1, 1884.

419. On a new muskrat, *Neofiber alleni*, from Florida. By Frederick W. True. Pp. 170-172. Sept. 1, 1884.

420. On a collection of birds made by Messrs. J. E. Benedict and W. Nye, of the United States Fish Commission steamer *Albatross*. By Robert Ridgway. Pp. 172-180. Sept. 1, 1884.

421. Contributions to the history of the Commander Islands. No. 2.—Investigations relating to the date of the extermination of Steller's sea-cow. By Leonhard Stejneger. Pp. 181-189. Sept. 1, 1884.

422. An identification of the figures of fishes in Catesby's Natural History of Carolina, Florida, and the Bahama Islands. By David S. Jordan. Pp. 190-199. Sept. 1, 1884.

423. A list of fishes collected in the east fork of White River, Indiana, with descriptions of two new species. By Charles H. Gilbert. Pp. 199-205. Sept. 1, 1884.

424. Notes on the fishes of Switz City Swamp, Greene County, Indiana. By Chas. H. Gilbert. Pp. 206-210. Sept. 1, 1884.

425. Remarks on the species of the genus *Cepphus*. By Leonhard Stejneger. Pp. 210-224, Sept. 1, 1884; pp. 225-229, 6 figs., Sept. 12, 1884.

426. Notes on fishes collected by David S. Jordan at Cedar Keys, Florida. By David S. Jordan and Joseph Swain. Pp. 230-234. Sept. 12, 1884.

427. List of fishes observed in the Saint John's River at Jacksonville, Florida. By David S. Jordan and Seth E. Meek. Pp. 235-237. Sept. 12, 1884.

428. Notes on the pipe-fishes of Key West, Florida, with description of *Siphostoma mckayi*, a new species. By Joseph Swain and Seth E. Meek. Pp. 237-239. Sept. 12, 1884.

429. Descriptions of *Physiculus fulvus* and *Lotella maxillaris*, new species of fishes collected in 1881 by the United States Fish Commission. By Tarleton H. Bean. Pp. 240-242. Sept. 12, 1884.

430. On the occurrence of the striped bass in the lower Mississippi Valley. By Tarleton H. Bean. Pp. 242-244. Sept. 12, 1884.

431. Notes on some Greenland fishes. By H. G. Dresel. Pp. 244-256, Sept. 12, 1884; pp. 257-258, Sept. 19, 1884.

432. Description of a new species of field-sparrow from New Mexico. By Robert Ridgway. P. 259. Sept. 19, 1884.

433. Notes on fishes collected at Guaymas, Mexico, by Mr. H. F. Emeric, with a description of *Gobiosoma histrio*, a new species. By David S. Jordan. Pp. 260-261. Sept. 19, 1884.

434. A review of the American species of marine Mugilidae. By David S. Jordan and Joseph Swain. Pp. 261-275. Sept. 19, 1884.

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435. Synopsis of the genera of the superfamily Teuthidoidea (families Teuthididae and Siganidae). By Theodore Gill. Pp. 275-281. Sept. 19, 1884.

436. A review of the species of the genus *Haemulon.* By David S. Jordan and Joseph Swain. Pp. 281-304, Sept. 19, 1884; pp. 305-317, Sept. 27, 1884.

437. List of fishes collected in the vicinity of New Orleans by Dr. R. W. Shufeldt, U. S. A. By David S. Jordan. Pp. 318-320, Sept. 27, 1884; pp. 321-322, Sept. 29, 1884.

438. List of the fishes collected in Lake Jessup, and Indian River, Florida, by Mr. R. E. Earll, with descriptions of two new species. By David S. Jordan. Pp. 322-324. Sept. 29, 1884.

439. Concerning some of the forms assumed by the patella in birds. By R. W. Shufeldt. Pp. 324-331, 7 figs. Sept. 29, 1884.

440. Observations upon a collection of insects made in the vicinity of New Orleans, Louisiana, during the years 1882 and 1883. By R. W. Shufeldt. Pp. 331-336, Sept. 29, 1884; pp. 337-338, 1 fig., Oct. 3, 1884.

441. Hermaphrodite fishes. [Translation from Der Naturforscher.] Pp. 339-340. Oct. 3, 1884.

442. Contributions to the history of the Commander Islands. No. 3.—Report on the Mollusca of the Commander Islands, Bering Sea, collected by Leonhard Stejneger in 1882 and 1883. By W. H. Dall. Pp. 340-349, 1 pl. Oct. 3, 1884.

443. Note on the Sternoptychidae. By Theodore Gill. Pp. 349-351. Oct. 3, 1884.

444. The osteological characteristics of the Lutjaninae. By Theodore Gill. Pp. 351-355. Oct. 3, 1884.

445. A contribution to the terminology of ichthyography. By Theodore Gill. Pp. 356-357. Oct. 3, 1884.

446. Description of a new species of coot from the West Indies. By Robert Ridgway. P. 358. Oct. 3, 1884.

447. A review of the American species of *Epinephelus* and related genera. By David S. Jordan and Joseph Swain. Pp. 358-384, Oct. 3, 1884; pp. 385-410, Oct. 9, 1884.

448. Synopsis of the plectognath fishes. By Theodore Gill. Pp. 411-416, Oct. 9, 1884; pp. 417-427, Oct. 18, 1884.

449. A review of the species of Lutjaninae and Hoplopagrinae found in American waters. By David S. Jordan and Joseph Swain. Pp. 427-432, Oct. 18, 1884; pp. 433-474, Oct. 23, 1884.

450. Description of four new species of Cyprinidae in the United States National Museum. By David S. Jordan and Seth E. Meek. Pp. 474-477. Oct. 23, 1884.

451. Description of four new species of *Poecilichthys* in the United States National Museum. By David S. Jordan. Pp. 477-480. Oct. 23, 1884.

452. Description of *Sciaena sciera,* a new species of *Sciaena* from Mazatlan and Panama. By David S. Jordan and Charles H. Gilbert. P. 480, Oct. 23, 1884; pp. 481-482, Feb. 25, 1885.

453. Description of *Zygonectes xonifer,* a new species of *Zygonectes,* from Nashville, Georgia. By David S. Jordan and Seth E. Meek. P. 482. Feb. 25, 1885.

454. Annotated list of the described species of parasitic Copepoda (Siphonostoma) from American waters contained in the United States National Museum. By Richard Rathbun. Pp. 483-492. Feb. 25, 1885.

455. On some new or little known decapod Crustacea, from recent Fish Commission dredgings off the east coast of the United States. By Sidney I. Smith. Pp. 493-511. Feb. 25, 1885.

456. Description of three new fishes from Kansas. By Charles H. Gilbert. Pp. 512-514. Feb. 25, 1885.

457. Description of a new race of the red-shouldered hawk from Florida. By Robert Ridgway. Pp. 514-515. Feb. 25, 1885.

458. On two hitherto unnamed sparrows from the coast of California. By Robert Ridgway. Pp. 516-518. Feb. 25, 1885.

459. Description of seven new species of Crustacea and one worm from Arctic Alaska. By John Murdoch. Pp. 518-522. Feb. 25, 1885.

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460. New or specially interesting shells of the Point Barrow Expedition. By W. H. Dall. Pp. 523-526. Feb. 25, 1885.

461. Description of a new species of *Hybopsis (Hybopsis montanus)*. By Seth E. Meek. Pp. 526-527. Feb. 25, 1885.

462. Contributions to the history of the Commander Islands. No. 4. A. Notes upon the plants collected on the Commander Islands (Bering and Copper Islands) by Leonhard Stejneger. By Asa Gray. Pp. 527-528, Feb. 25, 1885; p. 529, Mar. 23, 1885.

463. [Contributions to the history of the Commander Islands. No. 4.] B. Additional notes on the plants of the Commander Islands. By Leonhard Stejneger. Pp. 529-538. Mar. 23, 1885.

464. Description of a new species of flounder, *Citharichthys macrops,* from Pensacola, Florida. By H. G. Dresel. Pp. 539-541. Mar. 23, 1885.

465. Description of three new species of fishes (*Prionotus stearnsi, Prionotus ophryas,* and *Anthias vivanus*) collected at Pensacola, Florida, by Mr. Silas Stearns. By David S. Jordan and Joseph Swain. Pp. 541-544, Mar. 23, 1885; p. 545, Mar. 28, 1885.

466. Supplementary notes on North American fishes. By David S. Jordan. Pp. 545-548. Mar. 28, 1885.

467. Description of a new species of *Hybognathus (Hybognathus hayi)* from Mississippi. By David S. Jordan. Pp. 548-550. Mar. 28, 1885.

468. On the occurrence of *Loncheres armatus,* (Geoff.) Wagner, in the Island of Martinique, West Indies. By Frederick W. True. Pp. 550-551. Mar. 28, 1885.

469. Notes on fishes collected at San Cristobal Bay, Lower California, by Mr. Charles H. Townsend. By Rosa Smith. Pp. 551-553. Mar. 28, 1885.

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Proceedings of the United States National Museum, vol. 8. Pp. i-viii (title page, advertisement, table of contents, list of illustrations, and list of corrections); pp. 1-636 (Proceedings papers 470-548); pp. 637-686 (Appendix, circulars 32 and 33); pp. 687-729 (index); 15 figs., 25 pls. 1886.

470. List of fishes collected in Iowa and Missouri in August, 1884, with descriptions of three new species. By David S. Jordan and Seth E. Meek. Pp. 1-17. May 6, 1885.

471. On *Oestrelata fisheri* and *Oe. defilippiana.* By Robert Ridgway. Pp. 17-18 May 6, 1885.

472. *Icterus cucullatus,* Swainson, and its geographical variations. By Robert Ridgway. Pp. 18-19. May 6, 1885.

473. *Passer saturatus,* a new species of tree-sparrow from the Liu-Kiu Islands, Japan. By Leonhard Stejneger. Pp. 19-20. May 6, 1885.

474. Description of a new species of *Contopus* from tropical America. By Robert Ridgway. P. 21. May 6, 1885.

475. Note on the *Anser leucopareius* of Brandt. By Robert Ridgway. Pp. 21-22. May 6, 1885.

476. Description of a new warbler from Yucatan. By Robert Ridgway. P. 23. May 26, 1885.

477. Description of two new birds from Costa Rica. By Robert Ridgway. Pp. 23-24. May 6, 1885.

478. Description of three supposed new honey creepers from the Lesser Antilles, with a synopsis of the species of the genus *Certhiola.* By Robert Ridgway. Pp. 25-30. May 6, 1885.

479. On hornblende andesites from the new volcano on Bogosloff Island in Bering Sea. By George P. Merrill. Pp. 31-33. May 6, 1885.

480. On *Cathartes burrovianus,* Cassin, and *C. urubitinga,* Pelzeln. By Robert Ridgeway. Pp. 34-36. May 6, 1885.

481. On *Onychotes gruberi.* By Robert Ridgway. Pp. 36-38. May 6, 1885.

482. Notes and descriptions taken from selachians in the U. S. National Museum. By S. Garman. Pp. 39-44. May 6, 1885.

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483. A review of the American species of flying fishes *(Exocoetus)*. By David S. Jordan and Seth E. Meek. Pp. 44-67. May 6, 1885.

484. Notes on skeletons of Etheostomatinae. By David S. Jordan and Carl H. Eigenmann. Pp. 68-72. May 6, 1885.

485. Note on the scientific name of the yellow perch, the striped bass, and other North American fishes. By David S. Jordan. Pp. 72-73. May 6, 1885.

486. Description of a new species of *Plectromus (P. crassiceps)* taken by the United States Fish Commission. By Tarleton H. Bean. Pp. 73-74. May 6, 1885.

487. Description of a new species of *Aspidophoroides (A. güntherii)*, from Alaska. By Tarleton H. Bean. Pp. 74-75. May 6, 1885.

488. Remarks on the type specimen of *Buteo oxypterus*, Cassin. By Robert Ridgway. Pp. 75-77. May 6, 1885.

489. Early iron manufacture in Virginia—1619-1776. By R. Brock. Pp. 77-80. May 6, 1885.

490. Note on Mr. Garman's paper on "The American Salmon and Trout." By David S. Jordan. Pp. 81-83. June 19, 1885.

491. Report upon the Echini collected by the United States Fish Commission steamer *Albatross*, in the Caribbean Sea and Gulf of Mexico, January to May, 1884. By Richard Rathbun. Pp. 83-89. June 19, 1885.

492. An account of recent captures of the California sea-elephant, and statistics relating to the present abundance of the species. By Charles H. Townsend. Pp. 90-93. June 19, 1885.

493. Description of a new species of boat-billed heron from Central America. By Robert Ridgway. Pp. 93-94. June 19, 1885.

494. Description of a new hawk from Cozumel. By Robert Ridgway. Pp. 94-95. June 19, 1885.

495. On a new species of porpoise, *Phocaena dalli*, from Alaska. By Frederick W. True. Pp. 95-98, 4 pls. June 19, 1885.

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498. On the influence of atropia on the heart. By H. G. Beyer. Pp. 101-103, 1 pl. June 19, 1885.

499. Catalogue of the birds of Costa Rica, indicating those species of which the United States National Museum possesses specimens from that country. By José C. Zeledon. Pp. 104-118. June 19, 1885.

500. Identification of the species of Cyprinidae and Catostomidae, described by Dr. Charles Girard, in the Proceedings of the Academy of Natural Sciences of Philadelphia for 1856. By David S. Jordan. Pp. 118-127. June 19, 1885.

501. On the development of viviparous osseous fishes. By John A. Ryder. Pp. 128-155, 6 pls. June 19, 1885.

502. On certain features of the development of the salmon. By John A. Ryder. Pp. 156-162, 1 pl. June 19, 1885.

503. On the *Etheostoma variatum* of Kirtland. By David S. Jordan. Pp. 163-165. June 19, 1885.

504. On the occurrence of *Hadropterus aurantiacus* (Cope), in the French Broad River, North Carolina. By Tarleton H. Bean. Pp. 165-166. June 19, 1885.

505. On the identity of *Cottus maculatus*, Fischer, with *Cottus bubalis*, Euphrasen. By Tarleton H. Bean. Pp. 166-167. June 19, 1885.

506. Description of a new crustacean allied to *Homarus* and *Nephrops*. By Sidney I. Smith. Pp. 167-170. June 19, 1885.

507. On some genera and species of Penaeidae, mostly from recent dredgings of the United States Fish Commission. By Sidney I. Smith. Pp. 170-176, June 19, 1885; pp. 177-190, June 29, 1885.

508. On *Stathmonotus*, a new genus of fishes related to *Muraenoides*, from Florida. By Tarleton H. Bean. Pp. 191-192, 1 pl. June 29, 1885.

509. Note on *Stoasodon narinari*, Euphrasen. By Tarleton H. Bean. Pp. 192-193. June 29, 1885.

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510. On the American fishes in the Linnaean collection. By G. Brown Goode and Tarleton H. Bean. Pp. 193-208. June 29, 1885.

511. Note on *Epinephelus nigritus.* By David S. Jordan. P. 208, June 29, 1885; p. 209, July 24, 1885.

512. Description of a new species of *Amblystoma (Amblystoma copeianum)* from Indiana. By O. P. Hay. Pp. 209-213, 1 pl. July 24, 1885.

513. List of plants collected by Mr. Charles L. McKay at Nushagak, Alaska, in 1881, for the United States National Museum. By Frank H. Knowlton. Pp. 213-221. July 24, 1885.

514. The generic name of the pastinacas, or "sting-rays." By S. Garman. Pp. 221-224. July 24, 1885.

515. The influence of variations of temperature upon the rate and the work of the heart of the slider terrapin. *(Pseudemys rugosa.)* By H. G. Beyer. Pp. 225-229, 2 pls. July 24, 1885.

516. Description of a new species of *Pempheris (Pempheris poeyi)* from Cuba. By Tarleton H. Bean. Pp. 229-230. July 24, 1885.

517. Notes on *Epinephelus nigritus, Caulolatilus microps,* and *Coryphaena hippurus.* By Tarleton H. Bean. Pp. 230-233. July 24, 1885.

518. List of the birds of Labrador, including Ungava, East Main, Moose, and Gulf districts of the Hudson Bay Company, together with the Island of Anticosti. By Lucien M. Turner. Pp. 233-254. July 24, 1885.

519. Notes on some Floridian land and fresh-water shells with a revision of the Auriculacea of the eastern United States. By W. H. Dall. Pp. 255-288, 2 pls., July 24, 1885; p. 289, Aug. 27, 1885.

520. A list of the Mesozoic and Cenozoic types in the collections of the U. S. National Museum. By John Belknap Marcou. Pp. 290-336, Aug. 27, 1885; pp. 337-344, Sept. 17, 1885.

521. On *Turbinella pyrum,* Lamarck, and its dentition. By W. H. Dall. Pp. 345-348, 1 pl. Sept. 17, 1885.

522. A review of the American "golden warblers." By Robert Ridgway. Pp. 348-350. Sept. 17, 1885.

523. Notes on the mineralogy and lithology of the District of Columbia. By George P. Merrill. Pp. 351-353. Sept. 17, 1885.

524. Some emended names of North American birds. By Robert Ridgway. Pp. 354-356. Sept. 17, 1885

525. A list of the Astacidae in the United States National Museum. By Walter Faxon. Pp. 356-361. Sept. 17, 1885.

526. A list of the fishes known from the Pacific coast of tropical America, from the Tropic of Cancer to Panama. By David S. Jordan. Pp. 361-384, Sept. 17, 1885; pp. 385-394, Oct. 3, 1885.

527. Note on some Linnaean names of American fishes. By David S. Jordan. Pp. 394-396. Oct. 3, 1885.

528. On a collection of Medusae made by the United States Fish Commission steamer *Albatross* in the Caribbean Sea and Gulf of Mexico. By J. Walter Fewkes. Pp. 397-402, 1 pl. Oct. 3, 1885.

529. Description of *Hesperomys truci,* a new species belonging to the subfamily Murinae. By R. W. Shufeldt. Pp. 403-408, 1 pl. Oct. 3, 1885.

530. Notes on some apparently preoccupied ornithological generic names. By Leonhard Stejneger. Pp. 409-410. Oct. 3, 1885.

531. The Chaclacayo trephined skull. By Otis T. Mason. Pp. 410-412, 1 pl. Oct. 3, 1885.

532. On the parasites of the Hessian fly. By C. V. Riley. Pp. 413-422, 1 pl. Oct. 3, 1885.

533. Description of *Leptophidium cervinum* and *L. marmoratum,* new fishes from deep water off the Atlantic and Gulf coasts. By G. Brown Goode and Tarleton H. Bean. Pp. 422-424. Oct. 3, 1885.

534. Notice of recent additions to the marine Invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical

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remarks on others. Part V.—Annelida, Echinodermata, Hydroida, Tunicata. By A. E. Verrill. Pp. 424-448. Oct. 3, 1885.

535. Report on the flora of western and southern Texas. By V. Havard. Pp. 449-496, Oct. 3, 1885; pp. 497-533, 1 fig. Oct. 10, 1885.

536. Notes on the mollusks of the vicinity of San Diego, Cal., and Todos Santos Bay, Lower California. By Charles R. Orcutt, with comments by W. H. Dall. Pp. 534-544, Oct. 10, 1885; pp. 545-552, Oct. 26, 1885.

537. Notes on a collection of fishes from Florida, with descriptions of new or little known species. By O. P. Hay. Pp. 552-559. Oct. 26, 1885.

538. Description of an apparently new species of *Dromococcyx* from British Guiana. By Robert Ridgway. P. 559. Oct. 26, 1885.

539. Catalogue of a collection of birds made on the Island of Cozumel, Yucatan, by the naturalists of the U. S. Fish Commission steamer *Albatross*, Capt. Z. L. Tanner, Commander. By Robert Ridgway. Pp. 560-576, Oct. 26, 1885; pp. 577-583, Nov. 21, 1885.

540. Contributions to the history of the Commander Islands. No. 5.—Description of a new species of *Mesoplodon, M. stejnegeri*, obtained by Dr. Leonhard Stejneger, in Bering Island. By Frederick W. True. Pp. 584-585, 1 pl. Nov. 21, 1885.

541. A note upon the *Hyperoodon semijunctus* of Cope. By Frederick W. True. Pp. 585-586. Nov. 21, 1885.

542. Fresh-water sponges from Mexico. By Edward Potts. Pp. 587-589, 1 fig. Nov. 21, 1885.

543. Descriptions of new fishes obtained by the United States Fish Commission mainly from deep water off the Atlantic and Gulf coasts. By G. Brown Goode and Tarleton H. Bean. Pp. 589-605. Nov. 21, 1885.

544. Report upon the Echini collected by the U. S. Fish Commission steamer *Albatross* in the Gulf of Mexico from January to March, 1885. By Richard Rathbun. Pp. 606-608, Nov. 21, 1885; pp. 609-620, Dec. 28, 1885.

545. List of a few species of birds new to the fauna of Guadeloupe, West Indies, with a description of a new species of *Ceryle*. By George N. Lawrence. Pp. 621-624, Dec. 28, 1885; p. 625, Jan. 20, 1886.

546. Remarks upon the plumage of *Regulus calendula*. By Charles Wickliffe Beckham. Pp. 625-628. Jan. 20, 1886.

547. Notice of a collection of stalked crinoids made by the steamer *Albatross* in the Gulf of Mexico and Caribbean Sea, 1884 and 1885. By Richard Rathbun. Pp. 628-635. Jan. 20, 1886.

548. Notes on the great dolphin, *Coryphaena hippurus*, Linné. By Silas Stearns. Pp. 635-636. Jan. 20, 1886.

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Proceedings of the United States National Museum, vol. 9: Pp. i-viii (title page, advertisement, table of contents, list of illustrations, dates of publication of signatures, and list of corrections); pp. 1-660 (Proceedings papers 549-598); pp. 661-714 (index); 6 figs., 25 pls. 1887.

549. List of fishes collected in Arkansas, Indian Territory, and Texas, in September, 1884, with notes and descriptions. By David S. Jordan and Charles H. Gilbert. Pp. 1-25. Sept. 17, 1886.

550. Notes on fishes collected at Beaufort, North Carolina, with a revised list of the species known from that locality. By David S. Jordan. Pp. 25-30. Sept. 17, 1886.

551. List of fishes collected at Havana, Cuba, in December, 1883, with notes and descriptions. By David S. Jordan. Pp. 31-55. Sept. 17, 1886.

552. A review of the genera and species of Julidinae found in American waters. By David S. Jordan and Elizabeth G. Hughes. Pp. 56-70. Sept. 17, 1886.

553. On the value of the fin-rays and their characteristics of development in the classification of the fishes, together with remarks on the theory of degeneration. By John A. Ryder. Pp. 71-82, 1 fig. Sept. 17, 1886.

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554. On fulgurites. By George P. Merrill. Pp. 83-91, 1 pl. Sept. 17, 1886.

555. Descriptions of some new species of birds, supposed to be from the interior of Venezuela. By Robert Ridgway. Pp. 92-94. Sept. 17, 1886.

556. On *Aestrelata sandwichensis* Ridgw. By Robert Ridgway. Pp. 95-96. Sept. 17, 1886.

557. Description of a new genus and species of mole, *Dymecodon pilirostris,* from Japan. By Frederick W. True. Pp. 97-98. Sept. 25, 1886.

558. Review of Japanese birds. By Leonhard Stejneger. I.—The woodpeckers. Pp. 99-124, 1 pl. Sept. 25, 1886.

559. Catalogue of animals collected by the Geographical and Exploring Commission of the Republic of Mexico. By Fernando Ferrari-Perez. Pp. 125-160, Sept. 25, 1886; pp. 161-192, Oct. 2, 1886; pp. 193-199, Oct. 22, 1886.

560. The British marsh-tit. By Leonhard Stejneger. Pp. 200-201. Oct. 22, 1886.

561. Report on the mollusks collected by L. M. Turner at Ungava Bay, North Labrador, and from the adjacent Arctic seas. By W. H. Dall. Pp. 202-208, 1 pl. Oct. 22, 1886.

562. Contributions to the natural history of the Commander Islands. No. 6.—Report on Bering Island Mollusca collected by Mr. Nicholas Grebnitzki. By W. H. Dall. Pp. 209-219. Oct. 22, 1886.

563. On the occurrence of a new species of *Rhinoptera (R. encenadae)* in Todos Santos Bay, Lower California. By Rosa Smith. P. 220. Oct. 22, 1886.

564. An annotated list of the mammals collected by the late Mr. Charles L. McKay in the vicinity of Bristol Bay, Alaska. By Frederick W. True. Pp. 221-224. Oct. 22, 1886.

565. Notes on some fishes collected at Pensacola by Mr. Silas Stearns, with descriptions of one new species (*Chaetodon aya*). By David S. Jordan. Pp. 225-229. Oct. 22, 1886.

566. A review of the American species of Tetraodontidae. By David S. Jordan and Charles L. Edwards. Pp. 230-247. Oct. 22, 1886.

567. Description of a melanistic specimen of *Buteo latissimus* (Wils.) By Robert Ridgway. Pp. 248-249. Oct. 22, 1886.

568. Supplement to the list of Mesozoic and Cenozoic invertebrate types in the collections of the National Museum. By John Belknap Marcou. Pp. 250-254. Oct. 22, 1886.

569. Catalogue of the collection of recent Echini in the United States National Museum (corrected to July 1, 1886). By Richard Rathbun. Pp. 255-288, Oct. 22, 1886; pp. 289-293, Feb. 10, 1887.

570. Notes on species of the Australian genus *Pardalotus.* By Leonhard Stejneger. Pp. 294-296. Feb. 10, 1887.

571. Supplementary notes on some species of mollusks of the Bering Sea and vicinity. By W. H. Dall. Pp. 297-309, 1 pl. Feb. 10, 1887.

572. Descriptions of parasitic Copepoda belonging to the genera *Pandarus* and *Chondracanthus* (with seven plates). By Richard Rathbun. Pp. 310-324, 1 fig., 7 pls. Feb. 10, 1887.

573. Description of a recently new oyster-catcher (*Haematopus galapagensis*) from the Galapagos Islands. By Robert Ridgway. Pp. 325-326. Feb. 10, 1887.

574. A review of the species of the genus *Prionotus.* By David S. Jordan and Elizabeth G. Hughes. Pp. 327-338. Feb. 10, 1887.

575. A review of the American species of Belonidae. By David S. Jordan and Morton W. Fordice. Pp. 339-361. Feb. 10, 1887.

576. Description of *Rallus jouyi,* with remarks on *Rallus striatus* and *Rallus gularis.* By Leonhard Stejneger. Pp. 362-364. Feb. 10, 1887.

577. On *Turdus alpestris* and *Turdus torquatus,* two distinct species of European thrushes. By Leonhard Stejneger. Pp. 365-373. Feb. 10, 1887.

578. Review of Japanese birds. II.—Tits and nuthatches. By Leonhard Stejneger. Pp. 374-394, 1 fig. Feb. 10, 1887.

579. Review of Japanese birds. III.—Rails, gallinules, and coots. By Leonhard Stejneger. Pp. 395-408. Feb. 10, 1887.

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580. A new study of the genus *Dipodomys*. By Frederick W. True. Pp. 409-413. Feb. 10, 1887.

581. A revision of the lepidopterous family Saturniidae. By John B. Smith. Pp. 414-416, Feb. 10, 1887; pp. 417-437, 3 pls., Feb. 14, 1887.

582. Analyses of the cinchona barks on exhibition in the materia medica section, U. S. National Museum. By George E. Doering. Pp. 438-442. Feb. 14, 1887.

583. Norsk naval architecture. By George H. Boehmer. Pp. 443-459, 1 fig., 5 pls. Feb. 4, 1887.

584. A new land shell from California, with note on *Selenites duranti*, Newcomb. By William G. Mazyck. Pp. 460-461, 2 figs. Feb. 14, 1887.

585. Notes on a collection of fishes from the Escambia River, with description of a new species of *Zygonectes (Zygonectes escambiae)*. By Charles H. Bollman. Pp. 462-465. Feb. 14, 1887.

586. Description of six new species of fishes from the Gulf of Mexico, with notes on other species. By David S. Jordan and Barton W. Evermann. Pp. 466-476. Feb. 14, 1887.

587. A review of the Gobiidae of North America. By David S. Jordan and Carl H. Eigenmann. Pp. 477-518. Feb. 14, 1887.

588. Description of a new subspecies of *Cyclorhis* from Yucatan. By Robert Ridgway. P. 519. Feb. 14, 1887.

589. Description of a new species of *Myiarchus*, presumably from the Orinoco district of South America. By Robert Ridgway. P. 520. Feb. 14, 1887.

590. On a probable hybrid between *Dryobates nuttallii* (Gamb.) and *D. pubescens gairdnerii* (Aud.). By Robert Ridgway. Pp. 521-522. Feb. 14, 1887.

591. Description of an apparently new species of *Picolaptes*, from the lower Amazon. By Robert Ridgway. P. 523. Feb. 14, 1887.

592. On the status of *Synthliboramphus wumizusume* as a North American bird. By Leonhard Stejneger. P. 524. Feb. 14, 1887.

593. Notes on typical specimens of fishes described by Cuvier and Valenciennes and preserved in the Musée d'Histoire Naturelle in Paris. By David Starr Jordan. Pp. 525-528, Feb. 14, 1887; pp. 529-546, Feb. 24, 187.

594. Descriptions of ten species and one new genus of annelids from the dredgings of the U. S. Fish Commission steamer *Albatross*. By James E. Benedict. Pp. 547-553, 6 pls. Feb. 24, 1887.

595. A preliminary list of the fishes of the West Indies. By David Starr Jordan. Pp. 554-608. Feb. 24, 1887.

596. A catalogue of the birds of Grenada, West Indies, with observations thereon. By John Grant Wells. [Edited by George N. Lawrence.] Pp. 609-624, Feb. 24, 1887; pp. 625-633, Mar. 9, 1887.

597. On a collection of birds made by Mr. M. Namiye, in the Liu Kiu Islands, Japan, with descriptions of new species. By Leonhard Stejneger. Pp. 634-651. Mar. 9, 1887.

598. Water-birds of Japan. By T. W. Blakiston. Pp. 652-656, Mar. 9, 1887; pp. 657-660, 1887 (exact date of publication unknown).

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Proceedings of the United States National Museum, vol. 10. Pp. i-viii (title page, advertisement, table of contents, list of illustrations, dates of publication of signatures, and list of corrections); pp. 1-698 (Proceedings papers 599-675; pp. 699-731 (Appendix [circular 37]); pp. 733-771 (index); 11 figs., 39 pls. 1888.

599. Description of a new species of *Cotinga* from the Pacific coast of Costa Rica. By Robert Ridgway. Pp. 1-2. Apr. 25, 1887.

600. Description of a new form of *Spindalis* from the Bahamas. By Robert Ridgway. P. 3. Apr. 25, 1887.

601. Review of Japanese birds. IV. Synopsis of the genus *Turdus*. By Leonhard Stejneger. Pp. 4-5. Apr. 25, 1887.

602. Description of a new species of bat, *Vespertilio longicrus*, from Puget Sound. By Frederick W. True. Pp. 6-7. Apr. 25, 1887.

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603. Some distinctive cranial characters of the Canada lynx. By Frederick W. True. Pp. 8-9. Apr. 25, 1887.

604. Catalogue of the species of corals belonging to the genus *Madrepora,* contained in the United States National Museum. By Richard Rathbun. Pp. 10-19. Apr. 25, 1887.

605. Description of the adult female of *Carpodectes antoniae* Zeledon, with critical remarks, notes on habits, etc., by José C. Zeledón. By Robert Ridgway. P. 20. Apr. 25, 1887.

606. List of recently identified fossil plants belonging to the United States National Museum, with descriptions of several new species. By Leo Lesquereux. Pp. 21-32, Apr. 25, 1887; pp. 33-46, 4 pls., May 17, 1887.

607. Descriptions of new and little known etheostomoids. By Chas. H. Gilbert. Pp. 47-64. May 17, 1887.

608. A review of the North American species of the genera *Lagodon, Archosargus,* and *Diplodus.* By Carl H. Eigenmann and Elizabeth G. Hughes. Pp. 65-74. May 17, 1887.

609. Birds of Kauai Island, Hawaiian Archipelago, collected by Mr. Valdemar Knudsen, with descriptions of new species. By Leonhard Stejneger. Pp. 75-96, May 17, 1887; pp. 97-102, 1 pl., July 2, 1887.

610. Notes on the northern Palaearctic bullfinches. By Leonhard Stejneger. Pp. 103-110. July 2, 1887.

611. Description of a new species of *Porzana* from Costa Rica. By Robert Ridgway. P. 111. July 2, 1887.

612. Notes on *Ardea wuerdemanni* Baird. By Robert Ridgway. Pp. 112-115. July 2, 1887.

613. Description of a new species of *Ophichthys (Ophichthys retropinnis),* from Pensacola, Fla. By Carl H. Eigenmann. P. 116. July 2, 1887.

614. Contributions to the natural history of the Commander Islands. No. 7.—Revised and annotated catalogue of the birds inhabiting the Commander Islands. By Leonhard Stejneger. Pp. 117-145, 3 pls. July 2, 1887.

615. On a new species of *Tropidonotus* found in Washington. By E. D. Cope. P. 146. July 2, 1887.

616. *Trogon ambiguus* breeding in Arizona. By Robert Ridgway. P. 147. July 2, 1887.

617. Description of a new plumed partridge from Sonora. By Robert Ridgway. Pp. 148-150. July 2, 1887.

618. Description of a new genus of dendrocolaptine bird from the lower Amazon. By Robert Ridgway. P. 151. July 2, 1887.

619. Description of a new species of *Phacellodomus* from Venezuela. By Robert Ridgway. P. 152. July 2, 1887.

620. Contributions to the natural history of the Commander Islands. No. 8.—Description of *Alopecurus stejnegeri,* a new species of grass from the Commander Islands. By Geo. Vasey. P. 153. July 2, 1887.

621. Contributions to the natural history of the Commander Islands. No. 9.—On the Entomostraca collected by Mr. Leonhard Stejneger, on Bering Island, 1882-'83. By W. Lilljeborg. Pp. 154-156. July 2, 1887.

622. Notes on the osteology of the spotted tinamou *(Nothura maculosa).* By Frederic A. Lucas. Pp. 157-158, 2 figs. July 2, 1887.

623. Field-notes on the mammals, birds and reptiles of northern California. By Charles H. Townsend. Pp. 159-241, 4 figs., 1 pl. July 2, 1887.

624. A contribution to the knowledge of the fishes of Kansas. By O. P. Hay. Pp. 242-253. July 2, 1887.

625. Notes on the North American Lithobiidae and Scutigeridae. By Charles H. Bollman. Pp. 254-256, July 2, 1887; pp. 257-266, Aug. 1, 1887.

626. Description of two new species of Kaup's genus *Megascops.* By Robert Ridgway. Pp. 267-268. Aug. 1, 1887.

627. Notes on a collection of fishes sent by Mr. Charles C. Leslie from Charleston, South Carolina. By David S. Jordan and Carl H. Eigenmann. Pp. 269-270. Aug. 1, 1887.

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628. Review of Japanese birds. V.—Ibises, storks, and herons. By Leonhard Stejneger. Pp. 271-272, Aug. 1, 1887; pp. 273-319, 1 pl., Aug. 3, 1887.

629. On the systematic name of the Kamtschatkan and Japanese carrion crow. By Leonhard Stejneger. P. 320, Aug. 3, 1887; p. 321, Sept. 16, 1887.

630. Note on *Polynemus californiensis* of Thominot. By David S. Jordan. P. 322. Sept. 16, 1887.

631. List of the myriapods found in Escambia County, Florida, with descriptions of six new species. By Jerome McNeill. Pp. 323-327, 1 pl. Sept. 16, 1887.

632. Descriptions of twelve new species of Myriapoda, chiefly from Indiana. By Jerome McNeill. Pp. 328-334, 1 pl. Sept. 16, 1887.

633. The species of *Euerythra* Harv. By John B. Smith. Pp. 335-337, 1 pl. Sept. 16, 1887.

634. The North American species of *Callimorpha* Latr. By John B. Smith. Pp. 338-352, Sept. 16, 1887; p. 353, 1 pl., Sept. 29, 1887.

635. Annotated catalogue of the species of *Porites* and *Synaraea* in the United States National Museum, with a description of a new species of *Porites*. By Richard Rathbun. Pp. 354-366, 5 pls. Sept. 29, 1887.

636. Notes on a trematode from the white of a newly-laid hen's egg. By Edwin Linton. Pp. 367-369, 1 fig. Sept. 29, 1887.

637. Descriptions of five new species of fishes sent by Prof. A. Dugès from the Province of Guanajuato, Mexico. By Tarleton H. Bean. Pp. 370-375, 1 pl. Sept. 29, 1887.

638. On a collection of birds' sterna and skulls, collected by Dr. Thomas H. Streets, U. S. Navy. By R. W. Shufeldt. Pp. 376-384, Sept. 29, 1887; pp. 385-387, 4 figs., Nov. 3, 1887.

639. Description of a new species of *Thalassophryne (Thalassophryne dowi)* from Punta Arenas and Panama. By David S. Jordan and Charles H. Gilbert. P. 388. Nov. 3, 1887.

640. Notes on *Psittirostra psittacea* from Kauai, Hawaiian Islands. By Leonhard Stejneger. Pp. 389-390. Nov. 3, 1887.

641. Further contributions to the avifauna of the Liu Kiu Islands, Japan, with descriptions of new species. By Leonhard Stejneger. Pp. 391-415, 1 pl. Nov. 3, 1887.

642. Review of Japanese birds. VI.—The pigeons. By Leonhard Stejneger. Pp. 416-429, 1 pl. Nov. 3, 1887.

643. Description of a new *Muscisaxicola,* from Lake Titicaca, Peru. By Robert Ridgway. P. 430. Nov. 3, 1887.

644. On *Phrygilus gayi* (Eyd. & Gerv.) and allied species. By Robert Ridgway. Pp. 431-435. Nov. 3, 1887.

645. List of the Batrachia and Reptilia of the Bahama Islands. By E. D. Cope. Pp. 436-439. Nov. 3, 1887.

646. Descriptions of the species of *Heliaster* (a genus of star-fishes) represented in the U. S. National Museum. By Richard Rathbun. Pp. 440-448, Nov. 3, 1887; p. 449, 4 pls., Jan. 6, 1888.

647. New genera and species of North American Noctuidae. By John B. Smith. Pp. 450-479. Jan. 6, 1888.

648. Note on the "Analyse de la Nature" of Rafinesque. By David S. Jordan. Pp. 480-481. Jan. 6, 1888.

649. On a collection of birds made by Mr. M. Namiye, in the Islands of Idzu, Japan. By Leonhard Stejneger. Pp. 482-487. Jan. 6, 1888.

650. A review of the genus *Dendrocincla* Gray. By Robert Ridgway. Pp. 488-496, Jan. 6, 1888; p. 497, Aug. 6, 1888.

651. Descriptions of two new species of the genus *Unio,* from the Ozark region of Missouri. By R. Ellsworth Call. Pp. 498-500, 2 pls. Aug. 6, 1888.

652. Description of a new species of *Callionymus (Callionymus bairdi)* from the Gulf of Mexico. By David Starr Jordan. Pp. 501-502. Aug. 6, 1888.

653. Description of a new species of bird of the genus *Catharus,* from Ecuador. By Geo. N. Lawrence. P. 503. Aug. 6, 1888.

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654. Remarks on *Catharus berlepschi* Lawr. By Robert Ridgway. P. 504. Aug. 6, 1888.

655. Descriptions of some new species and subspecies of birds from Middle America. By Robert Ridgway. Pp. 505-510. Aug. 6, 1888.

656. Note on the generic name *Uropsila,* Scl. & Salv. By Robert Ridgway. P. 511. Aug. 6, 1888.

657. Notes on a young red snapper *(Lutjanus blackfordi)* from Great South Bay, Long Island. By Tarleton H. Bean. P. 512. Aug. 6, 1888.

658. Description of a new species of *Thyrsitops (T. violaceus)* from the fishing-banks off the New England coast. By Tarleton H. Bean. Pp. 513-514. Aug. 6, 1888.

659. A note on *Vesperugo hesperus* (Allen). By Frederick W. True. P. 515. Aug. 6, 1888.

660. Descriptions of new species and genera of birds from the lower Amazon. By Robert Ridgway. Pp. 516-528. Aug. 6, 1888.

661. A review of the genus *Psittacula* of Brisson. By Robert Ridgway. Pp. 529-548. Aug. 6, 1888.

662. Description of the nest and eggs of the California black-capped gnat-catcher *(Polioptila californica* Brewster). By Chas. E. Bendire. Pp. 549-550. Aug. 6, 1888.

663. Notes on a collection of birds' nests and eggs from southern Arizona Territory. By Chas. E. Bendire. Pp. 551-558. Aug. 6, 1888.

664. Descriptions of new species of parasitic copepods, belonging to the genera *Trebius, Perissopus,* and *Lernanthropus.* By Richard Rathbun. Pp. 559-571, 7 pls. Aug. 6, 1888.

665. Catalogue of a collection of birds made by Mr. Chas. H. Townsend, on islands in the Caribbean Sea and in Honduras. By Robert Ridgway. Pp. 572-592, Aug. 6, 1888; pp. 593-597, Sept. 19, 1888.

666. The meteoric iron which fell in Johnson County, Ark., 3.17 P.M., March 27, 1886. By George F. Kunz. Pp. 598-605, 2 figs., 3 pls. Sept. 19, 1888.

667. Review of Japanese birds. VII.—The creepers. By Leonhard Stejneger. Pp. 606-611. Sept. 19, 1888.

668. The characteristics of the elacatids. By Theodore Gill. Pp. 612-614, 1 pl. Sept. 19, 1888.

669. Note on the *Gramma loreto* of Poey. By Theodore Gill. Pp. 615-616. Sept. 19, 1888.

670. Descriptions of fourteen new species of North American myriapods. By Charles H. Bollman. Pp. 617-627. Sept. 19, 1888.

671. Description of a supposed new species of char *(Salvelinus aureolus),* from Sunapee Lake, New Hampshire. By Tarleton H. Bean. Pp. 628-630. Sept. 19, 1888.

672. Description of a new genus and species of fish, *Acrotus willoughbyi,* from Washington Territory. By Tarleton H. Bean. Pp. 631-632. Sept. 19, 1888.

673. Observations on the birds of southwestern Texas. By Charles Wickliffe Beckham. Pp. 633-688, Sept. 19, 1888; pp. 689-696, Oct. 12, 1888.

674. Description of a new *Psaltriparus* from southern Arizozna. By Robert Ridgway. P. 697. Oct. 12, 1888.

675. Description of a new species of *Xyrichthys (Xyrichthys jessiae)* from the Gulf of Mexico. By David Starr Jordan. P. 698. Oct. 12, 1888.

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Proceedings of the United States National Museum, vol. 11. Pp. i-xi (title page, advertisement, table of contents, list of illustrations, dates of publication of signatures, and list of errata); pp. 1-671 (Proceedings papers 676-760); pp. 673-703 (index); 137 figs., 60 pls. 1889.

676. New species of fossil wood *(Araucarioxylon arizonicum)* from Arizona and New Mexico. By F. H. Knowlton. Pp. 1-5, 1 pl. Nov. 8, 1888.

677. Description of two new species of fossil coniferous wood from Iowa and Montana. By F. H. Knowlton. Pp. 5-8, 2 pls. Nov. 8, 1888.

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678. Description of *Storeria dekayi,* var. *anomola.* By A. Dugès. Pp. 9-10, 1 fig. Nov. 8, 1888.

679. Recent determinations of fossil plants from Kentucky, Louisiana, Oregon, California, Alaska, Greenland, etc., with descriptions of new species. By Leo Lesquereux. Pp. 11-38, 13 pls. Nov. 8, 1888.

680. The paleontologic history of the genus *Platanus.* By Lester F. Ward. Pp. 39-42, 6 pls. Nov. 8, 1888.

681. Notes on Indiana fishes. By Barton W. Evermann and Oliver P. Jenkins. Pp. 43-57. Nov. 8, 1888.

682. On the occurrence of the Great Lake trout *(Salvelinus namaycush)* in the waters of British Columbia. By David S. Jordan. P. 58. Nov. 8, 1888.

683. The Navajo tanner. By R. W. Shufeldt. Pp. 59-66. 6 pls. Nov. 8, 1888.

684. Note on the genus *Dipterodon.* By Theodore Gill. Pp. 67-68. Nov. 8, 1888.

685. Note on the genus *Gobiomorus.* By Theodore Gill. Pp. 69-70. Nov. 8, 1888.

686. Notes on European marsh-tits with description of a new subspecies from Norway. By Leonhard Stejneger. Pp. 71-76. Nov. 8, 1888.

687. Hampe's method of determining Cu_2O in metallic copper. By Fred P. Dewey. Pp. 77-82. Nov. 8, 1888.

688. List of fossil plants collected by Mr. I. C. Russell, at Black Creek, near Gadsden, Ala., with descriptions of several new species. By Leo Lesquereux. Pp. 83-87, 1 pl. Nov. 8, 1888.

689. On a new series of *Charina* from California. By E. D. Cope. P. 88. [Illustration on plate accompanying No. 729.] Nov. 8, 1888.

690. Description of two species of *Palmoxylon*—one new—from Louisiana. By F. H. Knowlton. Pp. 89-91, 1 pl. Nov. 8, 1888.

691. Description of a new western subspecies of *Accipiter velox* (Wils.) and subspecific diagnosis of *A. cooperi mexicanus* (Swains.). By Robert Ridgway. P. 82. Nov. 8, 1888.

692. Further contributions to the Hawaiian avifauna. By Leonhard Stejneger. Pp. 93-103. Nov. 8, 1888.

693. Note on *Aestrelata sandwichensis* Ridgw. By Robert Ridgway. P. 104. Nov. 8, 1888.

694. On the serpentine of Montville, New Jersey. By George P. Merrill. Pp. 105-111, 2 pls. Nov. 6, 1888.

[694a.] [Unnumbered.] Description of a new pigeon from Guayaquil, Ecuador. By Robert Ridgway. P. 112. Nov. 6, 1888.

695. Notes on the European crested titmice. By Leonhard Stejneger. Pp. 113-114. Nov. 8, 1888.

696. On nephrite and jadeite. By F. W. Clarke and G. P. Merrill. Pp. 115-128. Nov. 8, 1888; pp. 129-130, 1 pl., Jan. 5, 1889.

697. The Navajo shoemaker. By Alexander M. Stephen. Pp. 131-136, 7 figs. Jan. 5, 1889.

698. Description of eighteen new species of fishes from the Gulf of California. By Oliver P. Jenkins and Barton W. Evermann. Pp. 137-158. Jan. 5, 1889.

699. Description of *Geomys personatus* and *Dipodomys compactus,* two new species of rodents from Padre Island, Texas. By Frederick W. True. Pp. 159-160. Jan. 5, 1889.

700. On the San Emigdio meteorite. By George P. Merrill. Pp. 161-167, 1 pl. Jan. 5, 1889.

701. Diagnosis of the Kamtschatkan three-toed woodpecker *(Picoides albidior).* By Leonhard Stejneger. P. 168. Jan. 5, 1889.

702. A remarkable Eskimo harpoon from East Greenland. By John Murdoch. Pp. 169-171, 3 figs. Jan. 5, 1889.

703. The corrugation in African sword blades and other weapons. By Walter Hough. P. 172. Jan. 5, 1889.

704. Notes on the osteology of the thrushes, Miminae, and wrens. By Frederic A. Lucas. Pp. 173-176, Jan. 5, 1889; pp. 177-180, 7 figs., 1 pl., Mar. 12, 1889.

705. An Eskimo strike-a-light from Cape Bathurst. By Walter Hough. Pp. 181-184, 6 figs. Mar. 12, 1889.

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706. Notes on *Cydosia* and *Cerathosia*. By John B. Smith. Pp. 185-190, 2 figs. Mar. 12, 1889.

707. On a peridotite from Little Deer Isle, in Penobscot Bay, Maine. By George P. Merrill. Pp. 191-195, 1 fig., 1 pl. Mar. 12, 1889.

708. Description of the adult male of *Acanthidops bairdi*. By Robert Ridgway. P. 196. Mar. 12, 1889.

709. The houses of the Kwakiutl Indians, British Columbia. By Franz Boas. Pp. 197-213, 21 figs., 3 pls. Mar. 12, 1889.

710. Description of a new species of *Hyalina*. By Wm. H. Dall. P. 214, 3 figs. Mar. 12, 1889.

711. Observations upon the osteology of the North American Anseres. By R. W. Shufeldt. Pp. 215-240, Mar. 12, 1889; pp. 241-251, 30 figs., Mar. 26, 1889.

712. On the proper name of the genus *Labrax* of Cuvier. By Theodore Gill. P. 252. Mar. 26, 1889.

713. Observations upon the osteology of the order Tubinares and Steganopodes. By R. W. Shufeldt. Pp. 253-304, Mar. 26, 1889; pp. 305-315, 43 figs., July 5, 1889.

714. Description of a new species of insect, *Fontaria pulchella*, from Strawberry Plains, Jefferson County, Tennessee. By Charles H. Bollman. P. 316. July 5, 1889.

715. On a new species of *Bufo* from Texas. By E. D. Cope. Pp. 317-318. July 5, 1889.

716. On the proper generic name of the tunny and albicore. By Theodore Gill. Pp. 319-320. July 5, 1889.

717. On the Psychrolutidae of Günther. By Theodore Gill. Pp. 321-327, 1 pl. July 5, 1889.

718. Ethnology of the Coast Indian tribes of Alaska. By A. P. Niblack. P. 328. July 5, 1889.

719. List of fishes collected by Alphonse Forrer about Mazatlan, with descriptions of two new species—*Heros beani* and *Poecilia butleri*. By David Starr Jordan. Pp. 329-334. July 5, 1889.

720. Notes on a collection of Myriapoda from Cuba. By Charles H. Bollman. Pp. 335-338. July 5, 1889.

721. Notes on a collection of Myriapoda from Mossy Creek, Tenn., with a description of a new species. By Charles H. Bollman. Pp. 339-342. July 5, 1889.

722. Notes upon some myriapods belonging to the U. S. National Museum. By Charles H. Bollman. Pp. 343-350. July 5, 1889.

723. Descriptions of fourteen species of fresh-water fishes collected by the U. S. Fish Commission in the summer of 1888. By David Starr Jordan. Pp. 351-362, 3 pls. July 5, 1889.

724. A study of the boomerang. By H. Eggers. Pp. 363-367, 3 figs. July 5, 1889.

725. List of plants from Lower California sent to the Smithsonian Institution by Lieut. Charles F. Pond, U. S. Navy. By George Vasey. P. 368. July 5, 1889.

726. A study of the American species of *Vertigo* contained in the U. S. National Museum, with the description of a new subgenus of Pupidae. By V. Sterki. Pp. 369-380, 6 figs., 1 pl. July 5, 1889.

727. On the snakes of Florida. By E. D. Cope. 381-394. July 5, 1889.

728. Catalogue of Batrachia and Reptilia brought by William Taylor from San Diego, Tex. By E. D. Cope. Pp. 395-398. July 5, 1889.

729. On the Eutaeniae of southeastern Indiana. By E. D. Cope. Pp. 399-401, 1 pl. [Fig. 2 pertains to No. 689.] July 5, 1889.

730. The Stone Age at Mount Vernon. By Otis T. Mason. P. 402. July 5, 1889.

731. Catalogue of the myriapods of Indiana. By Charles H. Bollman. Pp. 403-410. July 5, 1889.

732. List of fishes now in the U. S. National Museum collected in Nicaragua by Dr. Louis F. H. Birt. By David Starr Jordan. Pp. 411-412. July 5, 1889.

733. Notes on some albino birds presented to the U. S. National Museum, with some remarks on albinism. By Wirt Robinson. Pp. 413-416. July 5, 1889.

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734. Description of a new species of deer, *Cariacus clavatus*, from Central America. By Frederick W. True. Pp. 417-424. July 5, 1889.

735. Review of Japanese birds. VIII.—The nutcracker *(Nucifraga caryocatactes macrorhynchos)*. By Leonhard Stejneger. Pp. 425-432. July 5, 1889.

736. The single-headed drum of the Naskopie (Nagnagnot) Indians, Ungave district, Hudson Bay territory. By Lucien M. Turner. Pp. 433-434. Sept. 3, 1889.

737. Notes on a collection of fishes from the Maumee Valley, Ohio. By Seth E. Meek. Pp. 435-440. Sept. 3, 1889.

738. Description of new genera and species of fossils from the Middle Cambrian. By Charles D. Walcott. Pp. 441-446, 1 fig. Sept. 3, 1889.

739. A simple method of measuring the thickness of inclined strata. By Charles D. Walcott. Pp. 447-448, 1 fig. Sept. 3, 1889.

740. Notes on some Indian Territory land and fresh-water shells. By Chas. Torrey Simpson. Pp. 449-454. Sept. 3, 1889.

741. Notes on *Hydrocotyle americana* L. By Theodor Holm. Pp. 455-462, 2 pls. Sept. 3, 1899.

742. Notes on some California fishes, with descriptions of two new species. By Carl H. Eigenmann and Rosa S. Eigenmann. Pp. 463-466. Sept. 3, 1889.

743. On the occurrence of *Echinomys semispinosus*, Tomes, in Nicaragua. By Frederick W. True. Pp. 467-468. Sept. 3, 1889.

744. On the mammals collected in eastern Honduras in 1887 by Mr. Charles H. Townsend, with a description of a new subspecies of *Capromys* from Little Swan Island. By Frederick W. True. Pp. 469-472. Sept. 3, 1889.

745. The preparation of Japanese lacquer and the manufacture of Wakasa lacquer ware. By Romyn Hitchcock. Pp. 473-479. Sept. 3, 1889.

746. A fossil *Lingula* preserving the cast of the peduncle. By Charles D. Walcott. P. 480, 3 figs. Sept. 3, 1889.

747. Notes on the species of *Lachnosterna* of temperate North America, with descriptions of new species. By John B. Smith. Pp. 481-525, 13 pls. Sept. 3, 1889.

748. Description of *Coregonus pusillus*, a new species of whitefish from Alaska. By Tarleton H. Bean. P. 526. Sept. 3, 1889.

749. List of plants collected by Dr. Edward Palmer in Lower California in 1889. By George Vasey and Joseph N. Rose. Pp. 527-528, Sept. 3, 1889; pp. 529-536, Sept. 20, 1889.

750. Notes on Costa Rican birds, with descriptions of seven new species and subspecies and one new genus. By Robert Ridgway. Pp. 537-546. Sept. 20, 1889.

751. Review of Japanese birds. IX.—The wrens. By Leonhard Stejneger. Pp. 547-548. Sept. 20, 1889.

752. List of fishes collected at Green Turtle Cay, in the Bahamas, by Charles L. Edwards, with descriptions of three new species. By David Starr Jordan and Charles Harvey Bollman. Pp. 549-553. Sept. 20, 1889.

753. Description of a new species of *Bathymaster (B. jordani)* from Puget's Sound and Alaska. By Charles H. Gilbert. P. 554. Sept. 20, 1889.

754. Notes on a collection of fishes obtained in the Gila River, at Fort Thomas, Arizona, by Lieut. W. L. Carpenter, U. S. Army. By Philip H. Kirsch. Pp. 555-558. Sept. 20, 1889.

755. Notes on some Neotropical birds belonging to the United States National Museum. By Hans von Berlepsch. Pp. 559-560, Sept. 20, 1889; pp. 561-566, Sept. 25, 1889.

756. On the classification of the mail-cheeked fishes. By Theodore Gill. Pp. 567-592. Sept. 25, 1889.

757. Gleanings among the pleuronectids, and observations on the name *Pleuronectes*. By Theodore Gill. Pp. 593-606. Sept. 25, 1889.

758. Note on the genus *Spheroides*. By Theodore Gill. Pp. 607-608. Sept. 25, 1889.

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759. A list of fishes from a small tributary of the Poteau River, Scott County, Arkansas. By Charles H. Gilbert. Pp. 609-610. Sept. 25, 1889.

760. Descriptions of new Braconidae in the collection of the U. S. National Museum. By William H. Ashmead. Pp. 611-656, Sept. 25, 1889; pp. 657-671, Sept. 27, 1889.

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Proceedings of the United States National Museum, vol. 12. Pp. i-viii (title page, advertisement, table of contents, list of illustrations, dates of publication of articles, and list of errata); pp. 1-652 (Proceedings papers 761-789); pp. 653-686 (index); 14 figs., 23 pls. 1890.

761. A review of the genus *Xiphocolaptes* of Lesson. By Robert Ridgway. Pp. 1-20. Feb. 5, 1890.

762. A review of the genus *Sclerurus* of Swainson. By Robert Ridgway. Pp. 21-31. Feb. 5, 1890.

763. Descriptive notes of new genera and species from the Lower Cambrian or *Olenellus* zone of North America. By Charles D. Walcott. Pp. 33-46. Feb. 5, 1890.

764. New North American Acrididae, found north of the Mexican boundary. By Lawrence Bruner. Pp. 47-82, 1 pl. Feb. 5, 1890.

765. Contributions to the natural history of the Commander Islands. A.—Contributions to the history of Pallas' cormorant. By Leonhard Stejneger. Pp. 83-88. B.—Description of some bones of Pallas' cormorant *(Phalacrocorax perspicillatus)*. By Frederic A. Lucas. Pp. 88-94, 3 pls. Feb. 5, 1890.

766. Description of two new species of snakes from California. By Leonhard Stejneger. Pp. 95-99, 3 figs. Feb. 5, 1890.

767. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. I.—Birds collected on the Galapagos Islands in 1888. By Robert Ridgway. Pp. 101-128, 6 figs. Feb. 5, 1890.

768. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. II.—Birds collected on the Island of Santa Lucia, West Indies, the Abrolhos Islands, Brazil, and at the Straits of Magellan, in 1887-'88. By Robert Ridgway. Pp. 129-139. Feb. 5, 1890.

769. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. III.—Report on the batrachians and reptiles collected in 1887-'88. By E. D. Cope. Pp. 141-147. Feb. 5, 1890.

770. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. IV.—Descriptions of new species of fishes collected at the Galapagos Islands and along the coast of the United States of Colombia, 1887-'88. By David Starr Jordan and Charles Harvey Bollman. Pp. 149-183. Feb. 5, 1890.

771. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. V.—Annotated catalogue of the insects collected in 1887-'88. By L. O. Howard. Pp. 185-216. Feb. 5, 1890.

772. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. VI.—List of the plants collected in Alaska in 1888. By George Vasey. Pp. 217-218. Feb. 5, 1890.

773. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. VII.—Preliminary report on the collection of Mollusca and Brachiopoda obtained in 1887-'88. By William Healey Dall. Pp. 219-362, 10 pls. Mar. 7, 1890.

774. Notes on the occurrence of *Gillichthys y-cauda* at San Diego, California. By Charles H. Gilbert. P. 363. Mar. 4, 1890.

775. Description of a new genus and species of inarticulate brachiopod from the Trenton limestone. By Charles D. Walcott. Pp. 365-366, 4 figs. Mar. 4, 1890. (Advance sheets issued Dec. 10, 1889.)

776. The archaeology of the Potomac tide-water region. By Otis T. Mason. Pp. 367-370, 1 fig., 5 pls. Mar. 7, 1890.

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777. The palaeolithic period in the District of Columbia. By Thomas Wilson. Pp. 371-376, 2 pls. Mar. 7, 1890.

778. Notes on a third collection of birds made in Kauai, Hawaiian Islands, by Valdemar Knudsen. By Leonhard Stejneger. Pp. 377-386. Mar. 8, 1890.

779. Descriptions of new Ichneumonidae in the collection of the U. S. National Museum. By William H. Ashmead. Pp. 387-451. Apr. 21, 1890.

780. Description of the yellow-finned trout of Twin Lakes, Colorado. By David Starr Jordan and Barton Warren Evermann. Pp. 453-454. Apr. 21, 1890. (Advance sheets issued Jan. 20, 1890.)

781. Contributions toward a monograph of the Noctuidae of temperate North America—revision of some taeniocampid genera. By John B. Smith. Pp. 455-496, 2 pls. 1890 (exact date of publication unknown).

782. Catalogue of the described Araneae of temperate North America. By George Marx. Pp. 497-594. May 22, 1890.

783. Notes on the serpentinous rocks of Essex County, New York; from Aqueduct Shaft 26, New York City; and from near Easton, Pennsylvania. By George P. Merrill. Pp. 595-600. May 22, 1890.

784. A revision of the genus *Araucarioxylon* of Kraus, with compiled descriptions and partial synonymy of the species. By F. H. Knowlton. Pp. 601-617. May 22, 1890.

785. Notes on North American crayfishes—family Astacidae. By Walter Faxon. Pp. 619-634. May 22, 1890.

786. Description of two new species of bats—*Nyctinomus europs* and *N. orthotis*. By Harrison Allen. Pp. 635-640. May 22, 1890.

787. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. VIII.—Description of a new cottoid fish from British Columbia. By Tarleton H. Bean. Pp. 641-642. June ?, 1890. (Advance sheets issued Mar. 4, 1890.)

788. Description of a new lizard from Lower California. By Leonhard Stejneger. Pp. 643-644. June ?, 1890.

789. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No IX.—Catalogue of fishes collected at Port Castries, St. Lucia, by the steamer *Albatross*, November, 1888. By David Starr Jordan. Pp. 645-652. June ?, 1890.

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Proceedings of the United States National Museum, vol. 13. Pp. i-viii (title page, advertisement, table of contents, list of illustrations, dates of publication of articles, and list of errata); pp. 1-643 (Proceedings papers 790-841); pp. 645-665 (index); 12 figs., 38 pls. 1891.

790. Description of a new species of land shell from Cuba—*Vertigo cubana*. By Wm. H. Dall. Pp. 1-2, 2 figs. July 1, 1890.

791. Description of a new species of fish from Tippecanoe River, Indiana. By David Starr Jordan and Barton Warren Evermann. Pp. 3-4, 1 fig. July 1, 1890.

792. Remarks on some fossil remains considered as peculiar kinds of marine plants. By Leo Lesquereux. Pp. 5-12, 1 pl. July 18, 1890.

793. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. X.—On certain Mesozoic fossils from the Islands of St. Paul's and St. Peter's, in the Straits of Magellan. By Charles A. White. Pp. 13-14, 2 pls. July 22, 1890.

794. Notes on the leaves of *Liriodendron*. By Theodor Holm. Pp. 15-35, 6 pls. Sept. 9, 1890.

795. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XI.—New fishes collected off the coast of Alaska and the adjacent region southward. By Tarleton H. Bean. Pp. 37-45. July 1, 1890.

796. Further notes on the genus *Xiphocolaptes* of Lesson. By Robert Ridgway. Pp. 47-48. July 1, 1890.

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797. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XII.—A preliminary report on the fishes collected by the steamer *Albatross* on the Pacific coast of North America during the year 1889, with descriptions of twelve new genera and ninety-two new species. By Charles H. Gilbert. Pp. 49-126. July 1, 1890.

798. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XIII.—Catalogue of skeletons of birds collected at the Abrolhos Islands, Brazil, the Straits of Magellan, and the Galapagos Islands, in 1887-'88. By Frederic A. Lucas. Pp. 127-130. July 1, 1890.

799. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XIV.—Birds from the coasts of western North America and adjacent islands, collected in 1888-'89, with descriptions of new species. By Chas. H. Townsend. Pp. 131-142. Sept. 9, 1890.

800. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XV.—Reptiles from Clarion and Socorro Islands and the Gulf of California, with description of a new species. By Chas. H. Townsend. Pp. 143-144. Sept. 9, 1890.

801. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XVI.—Plants collected in 1889 at Socorro and Clarion Islands, Pacific Ocean. By Geo. Vasey and J. N. Rose. Pp. 145-149. Sept. 9, 1890.

802. On a new genus and species of colubrine snakes from North America. By Leonhard Stejneger. Pp. 151-155, 1 fig. Sept. 9, 1890.

803. The osteological characteristics of the family Anguillidae. By Theodore Gill. Pp. 157-160. Sept. 9, 1890.

804. The osteological characteristics of the family Synaphobranchidae. By Theodore Gill. Pp. 161-164. Sept. 9, 1890.

805. The osteological characteristics of the family Muraenidae. By Theodore Gill. Pp. 165-170. Sept. 9, 1890.

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808. On the snakes of the genus *Charina*. By Leonhard Stejneger. Pp. 177-182. Sept. 9, 1890.

809. On the North American lizards of the genus *Barissia* of Gray. By Leonhard Stejneger. Pp. 183-185. Sept. 9, 1890.

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811. Notes on the occurrence of a young crab-eater *(Elacate canada)*, from the lower Hudson Valley, New York. By A. K. Fisher. P. 195. Sept. 9, 1890.

812. Observations on the life history of the bottlenose porpoise. By Frederick W. True. Pp. 197-203, 1 fig. Sept. 9, 1890.

813. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XVII.—Descriptions of new West American land, fresh-water, and marine shells, with notes and comments. By Robert E. C. Stearns. Pp. 205-225, 3 pls. Sept. 16, 1890.

814. Description of two new species of mammals from Mt. Kilima-Njaro, East Africa. By Frederick W. True. Pp. 227-229. Sept. 16, 1890.

815. Osteological characteristics of the family Muraenesocidae. By Theodore Gill. Pp. 231-234. Sept. 16, 1890.

816. On the family Rancipitidae. By Theodore Gill. Pp. 235-238, 1 pl. Oct. 14, 1890.

817. The osteological characteristics of the family Simenchelyidae. By Theodore Gill. Pp. 239-242. Oct. 14, 1890.

818. The characteristics of the Dactylopteroidea. By Theodore Gill. Pp. 243-248, 1 pl. Oct. 14, 1890.

819. Notes on the birds observed during the cruise of the United States Fish Commission schooner *Grampus* in the summer of 1887. By William Palmer. Pp. 249-265. Oct. 14, 1890.

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820. Description of new forms of Upper Cambrian fossils. By Charles D. Walcott. Pp. 267-279, 2 pls. Oct. 14, 1890.

821. Notes on the Triassic plants from New Mexico. By Wm. M. Fontaine and F. H. Knowlton. Pp. 281-285, 5 pls. Dec. 31, 1890.

822. Notes on fishes of the genera *Agosia, Algansea,* and *Zophendum.* By David Starr Jordan. Pp. 287-288. Nov. 15, 1890.

823. Description of a new species of *Etheostoma* (*E. micropterus*) from Chihuahua, Mexico. By Charles H. Gilbert. Pp. 289-290. Nov. 15, 1890.

824. Description of a new species of bat of the genus *Carollia,* and remarks on *Carollia brevicauda.* By Harrison Allen. Pp. 291-298. Dec. 11, 1890.

825. Osteological characteristics of the family Amphipnoidae. By Theodore Gill. Pp. 299-302. Dec. 11, 1890.

826. Description of a new species of mouse, *Phenacomys longicaudus,* from Oregon. By Frederick W. True. Pp. 303-304. Nov. 15, 1890.

827. Notes on the habits of the moose in the far north of British America in 1865. By J. G. Lockhart. Pp. 305-308. Nov. 15, 1890.

828. Observations on the Farallon rail *(Porzana jamaicensis coturniculus* Baird). By Robert Ridgway. Pp. 309-311. Nov. 15, 1890.

829. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross.* No. XVIII.—List of fishes obtained in the harbor of Bahia, Brazil, and in adjacent waters. By David Starr Jordan. Pp. 313-336. Apr. 8, 1891.

830. Notes on the osteology of the Paridae, *Sitta,* and *Chamaea.* By Frederic A. Lucas. Pp. 337-345, 5 figs., 1 pl. Apr. 8, 1891.

831. Note on the Aspredinidae. By Theodore Gill. Pp. 347-352. Apr. 18, 1891.

832. Note on the genus *Felichthys* of Swainson. By Theodore Gill. Pp. 353-354. Apr. 8, 1891.

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837. Notes on North American Myriapoda of the family Geophilidae, with descriptions of three genera. By O. F. Cook and G. N. Collins. Pp. 383-396, 3 pls. May 6, 1891.

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839. Contributions toward a monograph of the Noctuidae of temperate North America.—Revision of the species of *Hadena* referable to *Xylophasia* and *Luperina.* By John B. Smith. Pp. 407-447, 2 pls. May 8, 1891.

840. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross.* No. XIX.—A supplementary list of fishes collected at the Galapagos Islands and Panama, with descriptions of one new genus and three new species. By Charles H. Gilbert. Pp. 449-455. May 29, 1891.

841. The birds of Manitoba By Ernest E. Thompson. Pp. 457-643, 1 pl. May 29, 1891.

Volume 14

Proceedings of the United States National Museum, vol. 14. Pp. i-vi (title page, advertisement, table of contents, list of illustrations, and dates of publication of articles); pp. 1-720 (Proceedings papers 842-886); pp. 721-750 (index); 3 figs., 34 pls. 1892.

842. A catalogue of the fresh-water fishes of South America. By Carl H. Eigenmann and Rosa S. Eigenmann. Pp. 1-81. July 16, 1891.

Proc. No.

843. Fishes collected by William P. Seal in Chesapeake Bay, at Cape Charles City, Virginia, September 16 to October 3, 1890. By Barton A. Bean. Pp. 83-94. July 16, 1891.

844. List of North American land and fresh-water shells received from the U. S. Department of Agriculture, with notes and comments thereon. By Robert E. C. Stearns. Pp. 95-106. July 16, 1891.

845. Relations of temperature to vertebrae among fishes. By David Starr Jordan. Pp. 107-120. July 16, 1891.

846. Report upon a collection of fishes made at Guaymas, Sonora, Mexico, with descriptions of new species. By Barton W. Evermann and Oliver P. Jenkins. Pp. 121-165, 2 pls. July 16, 1891.

847. Description of a new genus and species of tailless batrachian from tropical America. By Leonhard Stejneger and Frederick C. Test. Pp. 167-168, 1 pl. July 16, 1891.

848. On the structure of the tongue in humming birds. By Frederic A. Lucas. Pp. 169-172, 2 figs., 1 pl. July 16, 1891.

849. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XX.—On some new or interesting west American shells obtained from the dredgings of the U. S. Fish Commission steamer *Albatross* in 1888, and from other sources. By Wm. H. Dall. Pp. 173-191, 3 pls. July 24, 1891.

850. Descriptions of two supposed new species of mice from Costa Rica and Mexico, with remarks on *Hesperomys melanophrys* of Coues. By J. A. Allen. Pp. 193-196. July 24, 1891.

851. Contributions toward a monograph of the Noctuidae of temperate North America. Revision of the species of *Mamestra*. By John B. Smith. Pp. 197-276, 4 pls. Sept. 26, 1891.

852. Report upon the Annelida Polychaeta of Beaufort, North Carolina. By E. A. Andrews. Pp. 277-302, 7 pls. Aug. 20, 1891.

853. On *Eleginus* of Fischer, otherwise called *Tilesia* or *Pleurogadus*. By Theodore Gill. Pp. 303-305. Aug. 27, 1891.

854. List of shells collected on the west coast of South America, principally between latitudes 7°30′ S., and 8°49′ N., by Dr. W. H. Jones, Surgeon, U. S. Navy. By Robert E. C. Stearns. Pp. 307-335. Aug. 29, 1891.

855. Descriptions of new genera, species, and subspecies of birds from Costa Rica. By George K. Cherrie. Pp. 337-346. Sept. 4, 1891.

856. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXI.—Descriptions of apodal fishes from the tropical Pacific. By Charles H. Gilbert. Pp. 347-352. Sept. 8, 1891.

857. Description of a new species of chamaeleon from Kilima-njaro, eastern Africa. By Leonhard Stejneger. Pp. 353-354. Oct. 12, 1891.

858. The genus *Panopeus*. By James E. Benedict and Mary J. Rathbun. Pp. 355-385, 6 pls. Dec. 12, 1891.

859. Some observations on the Havesu-pai Indians. By R. W. Shufeldt. Pp. 387-390, 2 pls. Dec. 12, 1891.

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861. On the genera *Labrichthys* and *Pseudolabrus*. By Theodore Gill. Pp. 395-404. Sept. 8, 1891.

862. Description of a new scincoid lizard from East Africa. By Leonhard Stejneger. Pp. 405-406. Aug. 31, 1891.

863. Description of a new species of lizard from the Island San Pedro Martir, Gulf of California. By Leonhard Stejneger. Pp. 407-408. Aug. 31, 1891.

864. Description of a new North American lizard of the genus *Sauromalus*. By Leonhard Stejneger. Pp. 409-411. Oct. 27, 1891.

865. Notes on and list of birds and eggs collected in Arctic America, 1861-1866. By R. MacFarlane. Pp. 413-446. Sept. 26, 1891.

866. On the characters of some Paleozoic fishes. By E. D. Cope. Pp. 447-463, 6 pls. Dec. 12, 1891.

867. Description of a new species of whippoorwill from Costa Rica. By R. Ridgway. Pp. 465-466. Oct. 12, 1891.

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868. Notes on some birds from the interior of Honduras. By Robert Ridgway. Pp. 467-471. Oct. 26, 1891.

869. Notes on some Costa Rican birds. By Robert Ridgway. Pp. 473-478. Oct. 31, 1891.

870. Note on *Pachyrhamphus albinucha,* Burmeister. By Robert Ridgway. Pp. 479-480. Oct. 22, 1891.

871. Description of two supposed new forms of *Thamnophilus.* By Robert Ridgway. P. 481. Oct. 22, 1891.

872. Description of a new sharp-tailed sparrow from California. By Robert Ridgway. Pp. 483-484. Oct. 22, 1891.

873. Notes on *Scleroporus variabilis* and its geographical distribution in the United States. By Leonhard Stejneger. Pp. 485-488. Oct. 27, 1891.

874. Notes on Japanese birds contained in the Science College Museum, Imperial University, Tokyo, Japan. By Leonhard Stejneger. Pp. 489-498. Oct. 26, 1891.

875. Notes on the cubital coverts in the birds of paradise and bower birds. By Leonhard Stejneger. Pp. 499-500. Oct. 27, 1891.

876. Notes on some North American snakes. By Leonhard Stejneger. 501-505. Oct. 31, 1891.

877. Notes on the genus *Sittasomus* of Swainson. By Robert Ridgway. Pp. 507-510. Oct. 31, 1891.

878. On the snakes of the California genus *Lichanura.* By Leonhard Stejneger. Pp. 511-515. Nov. 7, 1891.

879. Notes on Costa Rica birds. By George K. Cherrie. Pp. 517-537. Nov. 17, 1891.

880. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross.* No. XXII.—Descriptions of thirty-four new species of fishes collected in 1888 and 1889, principally among the Santa Barbara Islands and in the Gulf of California. By Charles H. Gilbert. Pp. 539-566. Mar. 28, 1892.

881. The biology of the hymenopterous insects of the family Chalcididae. By L. O. Howard. Pp. 567-588. Mar. 28, 1892.

882. A critical review of the characters and variations of the snakes of North America. By E. D. Cope. Pp. 589-694. Mar. 28, 1892.

883. Note on the genus *Hiatula* of Lacépède or *Tautoga* of Mitchill. By Theodore Gill. P. 695. Mar. 25, 1892.

884. Note on the genus *Chonerhinus* or *Xenopterus.* By Theodore Gill. Pp. 697-699. Apr. 19, 1892.

885. On the genus *Gnathanacanthus* of Bleeker. By Theodore Gill. Pp. 701-704, 1 fig. Apr. 19, 1892.

886. Notes on the Tetraodontoidea. By Theodore Gill. Pp. 705-720, 1 pl. Apr. 20, 1892.

Volume 15

Proceedings of the United States National Museum, vol. 15. Pp. i-vi (title page, advertisement, table of contents, list of illustrations, dates of publication of articles); pp. 1-495 (Proceedings papers 887-918); pp. 497-508 (index); 8 figs., 84 pls. 1893.

887. Preliminary descriptions of thirty-seven new species of hermit crabs of the genus *Eupagurus* in the U. S. National Museum. By James E. Benedict. Pp. 1-26. Mar. 28, 1892.

888. Description of two apparently new flycatchers from Costa Rica. By George K. Cherrie. Pp. 27-28. Mar. 25, 1892.

889. A maid of Wolpai. By R. W. Shufeldt. Pp. 29-31, 1 pl. Aug. 2, 1892.

890. Contributions toward a monograph of the Noctuidae of boreal America.—Revision of the genus *Cucullia.* By John B. Smith. Pp. 35-52, 1 pl. Aug. 5, 1892.

891. Contributions toward a monograph of the Noctuidae of boreal America.—Revision of the Dicopinae. By John B. Smith. Pp. 53-64. Aug. 5, 1892.

892. Contributions toward a monograph of the Noctuidae of boreal America.—Revision of *Xylomiges* and *Morrisonia.* By John B. Smith. Pp. 65-86, 1 pl. Aug. 5, 1892.

Proc. No.

893. Notes on avian Entozoa. By Edwin Linton. Pp. 87-113, 5 pls. Aug. 5, 1892.

894. Preliminary description of a new genus and species of blind cave salamander from North America. By Leonhard Stejneger. Pp. 115-117, 1 pl. Aug. 2, 1892.

895. Descriptions of two new forms of *Basileuterus rufifrons,* from Mexico. By Robert Ridgway. P. 119. July 18, 1892.

896. Description of a new species of star-gazer *(Cathetostoma albigutta),* from the Gulf of Mexico. By Tarleton H. Bean. Pp. 121-122. July 18, 1892.

897. The fishes of San Diego, California. By Carl H. Eigenmann. Pp. 123-178, 9 pls. Aug. 2, 1892.

898. An annotated list of the shells of San Pedro Bay and vicinity. By Mrs. M. Burton Williamson, with a description of two new species by W. H. Dall. Pp. 179-220, 5 pls. Aug. 2, 1892.

899. Chinese relics in Alaska. By T. Dix Bolles. P. 221, 1 pl. Aug. 2, 1892.

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902. The evolution of house-building among the Navajo Indians. By R. W. Shufeldt. Pp. 279-282, 3 pls. Aug. 2, 1892.

903. Notes on fishes collected in Mexico by Prof. Alfredo Dugès, with descriptions of new species. By Tarleton H. Bean. Pp. 283-287, 1 pl. Aug. 2, 1892.

904. Notes on a collection of birds made by Mr. Harry V. Henson in the Island of Yezo, Japan. By Leonhard Stejneger. Pp. 289-359, 1 pl. Aug. 2, 1892.

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906. Two additions to the Japanese avifauna, including description of a new species. By Leonhard Stejneger. Pp. 371-373. Sept. 19, 1892.

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911. Notes on the Unionidae of Florida and the southeastern States. By Charles T. Simpson. Pp. 405-436, 26 pls. Oct. 26, 1892.

912. On a new subfamily of phyllostome bats. By Harrison Allen. Pp. 437-439, 1 fig. Oct. 26, 1892.

913. Description of a new genus of phyllostome bats. By Harrison Allen. Pp. 441-442, 2 figs. Oct. 26, 1892.

914. On Temminck's bat, *Scotophilus temminckii.* By Harrison Allen. Pp. 443-444. Oct. 26, 1892.

915. An annotated catalogue of the mammals collected by Dr. W. L. Abbott in the Kilma-Njaro region, East Africa. By Frederick W. True. Pp. 445-480, 5 figs., 6 pls. Oct. 26, 1892.

916. A description of the golden trout of Kern River, California, *Salmo mykiss agua-bonita.* By David Starr Jordan. Pp. 481-483. July 24, 1893.

917. On the occurrence of the spiny boxfish (genus *Chilomycterus*) on the coast of California. By Carl H. Eigenmann. P. 485, 1 pl. July 24, 1893.

918. Description of some fossil plants from the Great Falls coal field of Montana. By William M. Fontaine. Pp. 487-495, 3 pls. July 24, 1893.

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Volume 16

Proceedings of the United States National Museum, vol. 16. Pp. i-x (title page, advertisement, table of contents, list of illustrations, dates of publication of articles, and list of corrections); pp. 1-791 (Proceedings papers 919-975); pp. 793-808 (index); 21 figs., 84 pls. 1894.

Proc. No.

919. Introduction to a monograph of the North American bats. By Harrison Allen. Pp. 1-28. June 13, 1893.

920. Notes on the genera of Vespertilionidae. By Harrison Allen. Pp. 29-31. June 13, 1893.

921. Notes on a few fossil plants from the Fort Union group of Montana, with a description of one new species. By F. H. Knowlton. Pp. 33-36, 2 pls. July 27, 1893.

922. On a collection of batrachians and reptiles from Mount Orizaba, Mexico, with descriptions of two new species. By W. S. Blatchley. Pp. 37-42. June 13, 1893.

923. Description of two supposed new species of swifts. By Robert Ridgway. Pp. 43-44. June 13, 1893.

924. Notes on American Hemiptera Heteroptera. By A. L. Montandon. Pp. 45-52. June 13, 1893.

925. Catalogue of the fresh-water fishes of Central America and southern Mexico. By Carl H. Eigenmann. Pp. 53-60. June 13, 1893.

926. On the making of gelatin casts. By J. W. Scollick. Pp. 61-62. June 13, 1893.

927. Catalogue of the crabs of the family Maiidae in the U. S. National Museum. By Mary J. Rathbun. Pp. 63-103, 6 pls. July 26, 1893.

928. Notes on Erian (Devonian) plants from New York and Pennsylvania. By D. P. Penhallow. Pp. 105-114, 6 pls. July 26, 1893.

929. Notes on *Nematophyton crassum*. By D. P. Penhallow. Pp. 115-118, 4 pls. July 26, 1893.

930. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXIII.—Report on the Actiniae collected by the United States Fish Commission steamer *Albatross* during the winter of 1887-1888. By J. Playfair McMurrich. Pp. 119-216, 17 pls. July 29, 1893.

931. On the status of the gray shrike, collected by Capt. Blakiston, in Yezo, Japan. By Leonhard Stejneger. Pp. 217-218. June 6, 1893.

932. Throwing-sticks from Mexico and California. By Otis T. Mason. Pp. 219-221, 6 figs. July 19, 1893.

933. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXIV.—Descriptions of new genera and species of crabs from the west coast of North America and the Sandwich Islands. By Mary J. Rathbun. Pp. 223-260. July 12, 1893.

934. Notes on some fossil plants from the Trinity division of the Comanche series of Texas. By William Morris Fontaine. Pp. 261-282, 8 pls. Oct. 6, 1893.

935. Observations on the blind crayfishes of Indiana, with a description of a new subspecies; *Cambarus pellucidus testii*. By W. P. Hay. Pp. 283-286, 2 pls. Sept. 28, 1893.

936. The shofar—its use and origin. By Cyrus Adler. Pp. 287-301, 4 pls. Oct. 7, 1893.

937. List of Diatomaceae from a deep-sea dredging in the Atlantic Ocean off Delaware Bay by the U. S. Fish Commission steamer *Albatross*. By Albert Mann. Pp. 303-312. July 19, 1893.

938. Description of a new species of cyprinoid fish, *Couesius greeni*, from the head waters of Frazer River in British Columbia. By David S. Jordan. Pp. 313-314. July 19, 1893.

939. Note on the wall-eyed pollack *(Pollachius chalcogrammus fucensis)* of Puget Sound. By David S. Jordan and Charles H. Gilbert. Pp. 315-316. July 19, 1893.

Proc. No.

940. Preliminary report on the molluscan species collected by the United States scientific expedition to West Africa, in 1889-'90. By Robert E. C. Stearns. Pp. 317-339. Sept. 28, 1893.

941. On rare or little known mollusks from the west coast of North and South America, with descriptions of new species. By Robert E. C. Stearns. Pp. 341-352, 1 pl. Sept. 28, 1893.

942. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXV.—Report on the mollusk-fauna of the Galapagos Islands with descriptions of new species. By Robert E. C. Stearns. Pp. 353-450, 2 pls. Sept. 29, 1893.

943. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXVI.—Report on the pteropods and heteropods collected by the U. S. Fish Commission steamer *Albatross* during the voyage from Norfolk, Va., to San Francisco, Cal., 1887-'88. By James I. Peck. Pp. 451-466, 3 pls. Sept. 30, 1893.

944. Diagnosis of a new Californian lizard. By Leonhard Stejneger. P. 467. July 21, 1893.

945. Description of a supposed new species of *Odontophorus* from southern Mexico. By Robert Ridgway. Pp. 469-470. July 21, 1893.

946. A subtropical Miocene fauna in Arctic Siberia. By William Healey Dall. Pp. 471-478, 1 pl. Sept. 30, 1893.

947. Notes on a collection of birds from eastern Nicaragua and the Rio Frio, Costa Rica, with a description of a supposed new *Trogon*. By Charles W. Richmond. Pp. 479-532. Oct. 4, 1893.

948. Description of a new species of fruit bat, *Pteropus aldabrensis*, from Aldabra Island. By Frederick W. True. Pp. 533-534. Oct. 21, 1893. (Advance sheets issued July 14, 1893.)

949. Notice of the crustaceans collected by the United States scientific expedition to the west coast of Africa. By James E. Benedict. Pp. 535-541. Oct. 9, 1893.

950. A descriptive catalogue of the harvest-spiders (Phalangiidae) of Ohio. By Clarence M. Weed. Pp. 543-563, 1 fig., 13 pls. Oct. 25, 1893.

951. Scientific results of the U. S. eclipse expedition to West Africa, 1889-'90. Report upon the Insecta, Arachnida, and Myriopoda. By C. V. Riley. Pp. 565-590, 13 figs., 1 pl. Oct. 23, 1893.

952. On some fossil Unios and other fresh-water shells from the drift at Toronto, Canada; with a review of the distribution of the Unionidae of northeastern North America. By Chas. T. Simpson. Pp. 591-595. Oct. 25, 1893.

953. Descriptions of some new birds collected on the islands of Aldabra and Assumption, northwest of Madagascar, by Dr. W. L. Abbott. By Robert Ridgway. Pp. 597-600. Oct. 25, 1893. (Advance sheets issued Aug. 16, 1893.)

954. Notes on a small collection of mammals from the Tana River, East Africa, with descriptions of new species. By Frederick W. True. Pp. 601-603. Oct. 25, 1893.

955. Remarks on the avian genus *Myiarchus*, with special reference *to M. yucatanensis* Lawrence. By Robert Ridgway. Pp. 605-608. Oct. 25, 1893.

956. On a small collection of birds from Costa Rica. By Robert Ridgway. Pp. 609-614. Oct. 28, 1893.

957. Notes on a third installment of Japanese birds in the Science College Museum, Tokyo, Japan, with descriptions of new species. By Leonhard Stejneger. Pp. 615-638. Oct. 30, 1893.

958. Land shells of the genus *Bulimulus* in Lower California, with descriptions of several new species. By William Healey Dall. Pp. 639-647, 2 pls. Nov. 23, 1893.

959. Descriptions of new species of American fresh-water crabs. By Mary J. Rathbun. Pp. 649-661, 5 pls. Nov. 23, 1893.

Proc. No.

960. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXVII.—Catalogue of a collection of birds made in Alaska by Mr. C. H. Townsend during the cruise of the U. S. Fish Commission steamer *Albatross*, in the summer and autumn of 1888. By Robert Ridgway. Pp. 663-665. Nov. 24, 1893.

961. A revision of the genus *Formicarius* Boddaert. By Robert Ridgway. Pp. 667-686. Nov. 28, 1893.

962. Description of a new storm petrel from the coast of western Mexico. By Robert Ridgway. Pp. 687-688. Nov. 24, 1893.

963. Description of a new species of mouse (*Sitomys decolorus*) from Central America. By Frederick W. True. Pp. 689-690. Feb. 5, 1894.

964. Description of a new *Geothlypis* from Brownsville, Texas. By Robert Ridgway. Pp. 691-692. Feb. 5, 1894.

965. The proper generic name of the tunnies. By Theodore Gill. Pp. 693-694. Feb. 5, 1894.

966. The shell heaps of the east coast of Florida. By DeWitt Webb. Pp. 695-698, 7 pls. Apr. 9, 1894.

967. Description of a new blennioid fish from California. By Tarleton H. Bean. Pp. 699-701, 1 fig. Feb. 10, 1894.

968. Notes on Myriapoda from Loanda, Africa, collected by Mr. Heli Chatelaine, including a description of a new genus and species. By O. F. Cook. Pp. 703-708. Feb. 7, 1894.

969. Description of a new species of blind-snakes (Typhlopidae) from the Congo Free State. By Leonhard Stejneger. Pp. 709-710. Feb. 5, 1894.

970. On some collections of reptiles and batrachians from East Africa and the adjacent islands, recently received from Dr. W. L. Abbott and Mr. William Astor Chanler, with descriptions of new species. By Leonhard Stejneger. Pp. 711-741. Feb. 7, 1894.

971. Notes on recent collections of North American land, fresh water, and marine shells received from the U. S. Department of Agriculture. By Robert E. C. Stearns. Pp. 743-755. Feb. 5, 1894.

972. On the relationships of Taylor's mouse, *Sitomys taylori*. By Frederick W. True. Pp. 757-758. Feb. 7, 1894.

973. Notes on the natural history of Aldabra, Assumption and Glorioso Islands, Indian Ocean. By W. L. Abbott. Pp. 759-764. Feb. 9, 1894.

974. Remarks on Japanese quails. By Leonhard Stejneger. Pp. 765-769. Feb. 13, 1894.

975. Notes on birds of central Mexico, with descriptions of forms believed to be new. By P. L. Jouy. Pp. 771-791. Apr. 18, 1894.

Volume 17

Proceedings of the United States National Museum, vol. 17. Pp. i-xiii (title page, advertisement, table of contents, and list of plates); pp. 1-733 (Proceedings papers 976-1032); pp. 735-765 (index); 83 figs., 32 pls. 1895.

976. Notes on mammals of Baltistan and the Vale of Kashmir, presented to the National Museum by Dr. W. L. Abbott. By Frederick W. True. Pp. 1-16. May 8, 1894.

977. Description of a new lizard (*Verticaria beldingi*), from California. By Leonhard Stejneger. Pp. 17-18. May 4, 1894.

978. Note on a blue mineral, supposed to be ultramarine, from Silver City, New Mexico. By R. L. Packard. Pp. 19-20. May 4, 1894.

979. Descriptions of two new species of crabs from the western Indian Ocean, presented to the National Museum by Dr. W. L. Abbott. By Mary J. Rathbun. Pp. 21-24. May 4, 1894.

Proc. No.

980. Descriptions of a new genus and two new species of African fresh-water crabs. By Mary J. Rathbun. Pp. 25-27. May 4, 1894.

981. An analysis of jadeite from Mogoung, Burma. By Oliver C. Farrington. Pp. 29-31. July 29, 1894.

982. Notes on some skeletons and skulls of porpoises of the genus *Prodelphinus*, collected by Dr. W. L. Abbott in the Indian Ocean. By Frederick W. True. Pp. 33-37. July 19, 1894.

983. Description of nests and eggs of some new birds, collected on the Island of Aldabra, northwest of Madagascar, by Dr. W. L. Abbott. By Charles Bendire. Pp. 39-41. July 19, 1894.

984. Notes on the crabs of the family Inachidae in the United States National Museum. By Mary J. Rathbun. Pp. 43-75, 1 pl. July 21, 1894.

985. On the formation of stalactites and gypsum incrustations in caves. By George P. Merrill. Pp. 77-81, 4 pls. July 28, 1894.

986. Descriptions of a new genus and four new species of crabs from the Antillean region. By Mary J. Rathbun. Pp. 83-86. July 21, 1894. (Advance sheets issued Mar. 30, 1894.)

987. The formation of sandstone concretions. By George P. Merrill. Pp. 87-88, 1 pl. July 23, 1894.

988. Monograph of the genus *Guathodon*, Gray (*Rangia*, Desmoulins). By Wm. H. Dall. Pp. 89-106, 1 pl. July 23, 1894.

989. On the nomenclature and characteristics of the lampreys. By Theodore Gill. Pp. 107-110. July 23, 1894.

990. The nomenclature of the Myliobatidae or Aëtobatidae. By Theodore Gill. Pp. 111-114. July 23, 1894.

991. The nomenclature of the family Poeciliidae or Cyprinodontidae. By Theodore Gill. Pp. 115-116. July 19, 1894.

992. The differential characters of the Salmonidae and Thymallidae. By Theodore Gill. Pp. 117-122. July 19, 1894.

993. On the relations and nomenclature of *Stizostedion* or *Lucioperca*. By Theodore Gill. Pp. 123-128. July 21, 1894.

994. Description of a new species of cotton rat *(Sigmodon minima)* from New Mexico. By Edgar A. Mearns. Pp. 129-130. July 19, 1894.

995. Notes on the invertebrate fauna of the Dakota formation, with descriptions of new molluscan forms. By Charles A. White. Pp. 131-138, 1 pl. July 19, 1894.

996. The shells of the Tres Marias and other localities along the shores of Lower California and the Gulf of California. By Robert E. C. Stearns. Pp. 139-204. July 19, 1894.

997. Notes on a Japanese species of reed warbler. By Leonhard Stejneger. Pp. 205-206. July 21, 1894.

998. A review of the fossil flora of Alaska, with descriptions of new species. By F. H. Knowlton. Pp. 207-240, 1 pl. Aug. 2, 1894.

999. Diagnoses of new North American mammals. By Frederick W. True. Pp. 241-243. Nov. 15, 1894. (Advance sheets issued Apr. 26, 1894.)

1000. Descriptions of new species of starfishes and ophiurans, with a revision of certain species formerly described; mostly from the collections made by the United States Commission of Fish and Fisheries. By A. E. Verrill. Pp. 245-297. Nov. 15, 1894.

1001. Notes on the anatomy and affinities of the Coerebidae and other American birds. By Frederic A. Lucas. Pp. 299-312, 13 figs. Nov. 15, 1894.

1002. Discovery of the genus *Oldhamia* in America. By Charles D. Walcott. Pp. 313-315, 1 fig. Nov. 15, 1894.

1003. Notes on reptiles and batrachians collected in Florida in 1892 and 1893. By Einar Loennberg. Pp. 317-339, 3 figs. Nov. 15, 1894.

1004. On the rodents of the genus *Sminthus* in Kashmir. By Frederick W. True. Pp. 341-343. Nov. 15, 1894.

Proc. No.

1005. The relationship of the lacertilian genus *Anniella*, Gray. By G. Baur. Pp. 345-351. Nov. 15, 1894.

1006. Diagnoses of some undescribed wood rats (genus *Neotoma*) in the National Museum. By Frederick W. True. Pp. 353-355. Nov. 15, 1894. (Advance sheets issued June 27, 1894.)

1007. Descriptions of twenty-two new species of birds from the Galapagos Islands. By Robert Ridgway. Pp. 357-370. Nov. 15, 1894.

1008. Descriptions of some new birds from Aldabra, Assumption, and Gloriosa Islands, collected by Dr. W. L. Abbott. By Robert Ridgway. Pp. 371-373. Nov. 15, 1894.

1009. A revision of the fishes of the subfamily Sebastinae of the Pacific coast of America. By Carl H. Eigenmann and Charles H. Beeson. Pp. 375-407. Nov. 15, 1894.

1010. Additional notes on the native trees of the lower Wabash Valley. By Robert Ridgway. Pp. 409-421, 6 pls. Jan. 24, 1895.

1011. Distribution of the land and fresh-water mollusks of the West Indian region, and their evidence with regard to past changes of land and sea. By Charles Torrey Simpson. Pp. 423-450, 1 pl. Jan. 26, 1895.

1012. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXVIII.—On Cetomimidae and Rondeletiidae, two new families of bathybial fishes from the northwestern Atlantic. By G. Brown Goode and Tarleton H. Bean. Pp. 451-454, 1 pl. Jan. 26, 1895.

1013. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXIX.—A revision of the order Heteromi, deep-sea fishes, with a description of the new generic types *Macdonaldia* and *Lipogenys*. By G. Brown Goode and Tarleton H. Bean. Pp. 455-470, 1 pl. Jan. 26, 1895.

1014. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXX.—On *Harriotta*, a new type of chimaeroid fish from the deeper waters of the northwestern Atlantic. By G. Brown Goode and Tarleton H. Bean. Pp. 471-473, 1 pl. Jan. 26, 1895.

1015. Overlaying with copper by the American aborigines. By Otis T. Mason. Pp. 475-477, 4 figs. Jan. 26, 1895.

1016. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXI.—Descriptions of new genera and species of crabs of the family Lithodidae, with notes on the young of *Lithodes camtschaticus* and *Lithodes brevipes*. By James E. Benedict. Pp. 479-488. Jan. 29, 1895.

1017. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXII.—Report on the Crustacea of the order Stomatopoda collected by the steamer *Albatross* between 1885 and 1891, and on other specimens in the U. S. National Museum. By Robert Payne Bigelow. Pp. 489-550, 28 figs., 3 pls. Feb. 5, 1895.

1018. The pterylography of certain American goat-suckers and owls. By Hubert Lyman Clark. Pp. 551-572, 11 figs. May 11, 1895.

1019. The box tortoises of North America. By W. E. Taylor. Pp. 573-588, 7 figs. May 11, 1895.

1020. Description of *Uta mearnsi*, a new lizard from California. By Leonhard Stejneger. Pp. 589-591. May 11, 1895. (Advance sheets issued Nov. 30, 1894.)

1021. Notes on Butler's garter snake. By Leonhard Stejneger. Pp. 593-594. May, 11, 1895.

1022. On the specific name of the coachwhip snake. By Leonhard Stejneger. Pp. 595-596. May 11, 1895.

1023. Description of a new salamander from Arkansas with notes on *Ambystoma annulatum*. By Leonhard Stejneger. Pp. 597-599. May 11, 1895.

1024. Diagnosis of a new genus of trogons *(Heterotrogen)*, based on *Hapaloderma vittatum* of Shelley; with a description of the female of that species. By Charles W. Richmond. Pp. 601-603. May 11, 1895.

1025. On the bothriothoracine insects of the United States. By L. O. Howard. Pp. 605-613. May 11, 1895.

Proc. No.

1026. Notes on the geographical distribution of scale insects. By T. D. A. Cockerell. Pp. 615-625. May 11, 1895.

1027. Description of a new species of rockfish, *Sebastichthys brevispinis*, from Alaska. By Tarleton H. Bean. Pp. 627-628. May 11, 1895.

1028. Description of a new species of fish, *Bleekeria gilli*. By Tarleton H. Bean. Pp. 629-630. May 11, 1895.

1029. Description of *Gobioides broussoneti*, a fish new to North America, from the Gulf of Mexico. By Tarleton H. Bean and Barton A. Bean. Pp. 631-632, 1 fig. May 11, 1895.

1030. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXIII.—Descriptions of two new flounders, *Gastropsetta frontalis* and *Cyclopsetta chittendeni*. By Barton A. Bean. Pp. 633-636, 3 figs. May 11, 1895.

1031. Notes on some eruptive rocks from Gallatin, Jefferson, and Madison Counties, Montana. By George P. Merrill. Pp. 637-673, 10 figs. May 11, 1895.

1032. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXIV.—Report on Mollusca and Brachiopoda dredged in deep water, chiefly near the Hawaiian Islands, with illustrations of hitherto unfigured species from northwest America. By William Healey Dall. Pp. 675-733, 3 figs., 10 pls. 1895 (exact date of publication unknown).

Volume 18

Proceedings of the United States National Museum, vol. 18. Pp. i-xiv (title page, advertisement, table of contents, list of plates, and list of corrections); pp. 1-781 (Proceedings papers 1033-1100); pp. 783-819 (index); 51 figs., 35 pls. 1896.

1033. Diagnoses of new mollusks from the survey of the Mexican boundary. By W. H. Dall. Pp. 1-6. Apr. 28, 1896.

1034. Diagnoses of new species of mollusks from the west coast of America. By W. H. Dall. Pp. 7-20. Apr. 23, 1896.

1035. Diagnoses of new Tertiary fossils from the southern United States. By W. H. Dall. Pp. 21-46. Apr. 23, 1896.

1036. Two new diplopod Myriapoda of the genus *Oxydesmus* from the Congo. By O. F. Cook. Pp. 47-52. Apr. 23, 1896.

1037. *Priodesmus*, a new genus of Diplopoda from Surinam. By O. F. Cook. Pp. 53-57, 1 pl. Apr. 23, 1896.

1038. On *Geophilus attenuatus*, Say, of the class Chilopoda. By O. F. Cook. Pp. 59-62. Apr. 23, 1896.

1039. An arrangement of the Geophilidae, a family of Chilopoda. By O. F. Cook. Pp. 63-75. Apr. 23, 1896.

1040. Description of a new species of golden beetle from Costa Rica. By Martin L. Linell. Pp. 77-78. Apr. 23, 1896. (Advance sheets issued Jan. 12, 1895.)

1041. Two new species of beetles of the tenebrionid genus *Echocerus*. By F. H. Chittenden. Pp. 79-80. Apr. 23, 1896. (Advance sheets issued Jan. 16, 1895.)

1042. East African Diplopoda of the suborder Polydesmoidea, collected by Mr. William Astor Chanler. By O. F. Cook. Pp. 81-111, 5 pls. Apr. 23, 1896.

1043. Description of a new species of pipefish *(Siphostoma scovelli)* from Corpus Christi, Texas. By Barton W. Evermann and William C. Kendall. Pp. 113-115. Apr. 16, 1896.

1044. Description of a new species of snake *(Tantilla eiseni)* from California. By Leonhard Stejneger. Pp. 117-118. Apr. 16, 1896.

1045. Description of a new species of ground warbler from eastern Mexico. By Robert Ridgway. Pp. 119-120. Apr. 16, 1896.

1046. East African Odonata, collected by Doctor W. L. Abbott. By Philip P. Calvert. Pp. 121-142, 15 figs. Apr. 23, 1896.

1047. Notes on the Odonata from east Africa, collected by the Chanler Expedition. By Philip P. Calvert. Pp. 143-145. Apr. 23, 1896.

Proc. No.

1048. On the proper name of the gunnels or butterfishes. By Theodore Gill. Pp 147-151. Apr. 23, 1896.

1049. The differential characters of the syngnathid and hippocampid fishes. By Theodore Gill. Pp. 153-159. Apr. 23, 1896.

1050. Notes on the synonymy of the Torpedinidae or Narcobatidae. By Theodore Gill. Pp. 161-165. Apr. 23, 1896.

1051. The families of synentognathous fishes and their nomenclature. By Theodore Gill. Pp. 167-178. Apr. 23, 1896.

1052. On the application of the name *Teuthis* to a genus of fishes. By Theodore Gill. Pp. 179-189. Apr. 23, 1896.

1053. Notes on the nomenclature of *Scymnus* or *Scymnorhinus,* a genus of sharks. By Theodore Gill. Pp. 191-193. May 27, 1896.

1054. Notes on the genus *Cephaleutherus* of Rafinesque, and other rays with aberrant pectoral fins (*Propterygia* and *Hieroptera*). By Theodore Gill. Pp. 195-198. Apr. 23, 1896.

1055. Notes on characinoid fishes with ctenoid scales, with a description of a new *Psectrogaster.* By Theodore Gill. Pp. 199-203. May 27, 1896.

1056. The differential characters of characinoid and erythrinoid fishes. By Theodore Gill. Pp. 205-209. Apr. 23, 1896.

1057. Notes on *Orectolobus* or *Crossorhinus,* a genus of sharks. By Theodore Gill. Pp. 211-212. Apr. 16, 1896.

1058. Note on the fishes of the genus *Characinus.* By Theodore Gill. Pp. 213-215. Apr. 16, 1896.

1059. The nomenclature of *Rachicentron* or *Elacate,* a genus of acanthopterygian fishes. By Theodore Gill. Pp. 217-219. Apr. 23, 1896.

1060. Note on the nomenclature of the poecilioid fishes. By Theodore Gill. Pp. 221-224. Apr. 23, 1896.

1061. The nomenclature of the fishes of the characinoid genus *Tetragonopterus.* By Theodore Gill. Pp. 225-227. Apr. 23, 1896.

1062. List of the Lepidoptera collected in eastern Africa by Dr. W. L. Abbott, with descriptions of some apparently new species. By W. J. Holland. Pp. 229-258. May 27, 1896.

1063. List of Lepidoptera collected in Somali-land, East Africa, by Mr. William Astor Chanler and Lieutenant Von Hoehnel. By W. J. Holland. Pp. 259-264. May 27, 1896.

1064. List of the Lepidoptera from Aldabra, Seychelles, and other East African islands, collected by Dr. W. L. Abbott. By W. J. Holland. Pp. 265-273. May 27, 1896.

1065. List of the Lepidoptera collected in Kashmir by Dr. W. L. Abbott. By W. J. Holland. Pp. 275-279, 2 pls. May 27, 1896.

1066. Notes on asbestos and asbestiform minerals. By George P. Merrill. Pp. 281-292, 5 figs. Apr. 23, 1896.

1067. Preliminary description of some new birds from the Galapagos Archipelago. By Robert Ridgway. Pp. 293-294. 1896 (exact date of publication unknown).

1068. The classification and geographical distribution of the pearly fresh-water mussels. By Charles T. Simpson. Pp. 295-343, 1 pl. May 19, 1896.

1069. Note on the occurrence of an armadillo of the genus *Xenurus* in Honduras. By Frederick W. True. Pp. 345-347, 2 pls. July 8, 1896.

1070. The genus *Callinectes.* By Mary J. Rathbun. Pp. 349-375, 17 pls. July 8, 1896.

1071. Descriptions of two new species of fresh-water crabs from Costa Rica. By Mary J. Rathbun. Pp. 377-379, 3 figs., 2 pls. July 8, 1896.

1072. Description of four new Triassic Unios from the Staked Plains of Texas. By Charles Torrey Simpson. Pp. 381-385, 5 figs. May 19, 1896.

1073. Revision of the North American Empidae—a family of two-winged insects. By D. W. Coquillett. Pp 387-440. May 25, 1896.

1074. Description of a new subspecies of the genus *Peucedramus,* Coues. By Robert Ridgway. P. 441. May 21, 1896.

1075. Preliminary diagnoses of new mammals from the Mexican border of the United States. By Edgar A. Mearns. Pp. 443-447. May 23, 1896. (Advance sheets issued Mar. 25, 1896.)

1076. Characters of a new American family of passerine birds. By Robert Ridgway. Pp. 449-450. June 24, 1896.

1077. Osteological and pterylographical characters of the Procniatidae. By F. A. Lucas. Pp. 505-507, 5 figs. June 24, 1896.

1078. Catalogue of a collection of birds made by Doctor W. L. Abbott in Kashmir, Baltistan and Ladak, with notes on some of the species, and a description of a new species of *Cyanecula*. By Charles W. Richmond. Pp. 451-503. June 24, 1896.

1079. On birds collected by Doctor W. L. Abbott in the Seychelles, Amirantes, Gloriosa, Assumption, Aldabra, and adjacent islands, with notes on habits, etc., by the collector. By Robert Ridgway. Pp. 509-546. June 24, 1896.

1080. Descriptions of two new subspecies of the downy woodpecker, *Dryobates pubescens* (Linnaeus). By Harry C. Oberholser. Pp. 547-550. June 24, 1896.

1081. Preliminary description of a new subgenus and six new species and subspecies of hares, from the Mexican border of the United States. By Edgar A. Mearns. Pp. 551-565. June 24, 1896.

1082. Note on *Plectroplites* and *Hypoplectrodes*, genera of serranoid fishes. By Theodore Gill. Pp. 567-568. July 24, 1896.

1083. Catalogue of a collection of birds made by Doctor W. L. Abbott in eastern Turkestan, the Thian-Shan Mountains, and Tagdumbash Pamir, central Asia, with notes on some of the species. By Charles W. Richmond. Pp. 569-591. July 25, 1896.

1084. Descriptions of three species of sand fleas (amphipods) collected at Newport, Rhode Island. By Sylvester D. Judd. Pp. 593-603, 11 figs. July 25, 1896.

1085. Remarks on the synonymy of some North American scolytid beetles. By William Eichhoff. (Translated and annotated by E. A. Schwarz.) Pp. 605-610, Aug. 12, 1896.

1086. Fossil jelly fishes from the Middle Cambrian terrane. By Charles D. Walcott. Pp. 611-614, 2 pls. Aug. 12, 1896.

1087. Preliminary descriptions of a new genus and three new species of crustaceans from an artesian well at San Marcos, Texas. By James E. Benedict. Pp. 615-617, Aug. 12, 1896. (Advance sheets issued Apr. 14, 1896.)

1088. Description of a new genus and species of blind tailed batrachians from the subterranean waters of Texas. By Leonhard Stejneger. Pp. 619-621. Aug. 12, 1896. (Advance sheets issued Apr. 15, 1896.)

1089. Description of a new stickleback, *Gasterosteus gladiunculus*, from the coast of Maine. By W. C. Kendall. Pp. 623-624. Aug. 12, 1896.

1090. Description of a new species of ant thrush from Nicaragua. By Charles W. Richmond. Pp. 625-626. Aug. 12, 1896.

1091. Partial list of birds collected at Alta Mira, Mexico, by Mr. Frank B. Armstrong. By Charles W. Richmond. Pp. 627-632. Aug. 12, 1896.

1092. On some reared parasitic hymenopterous insects from Ceylon. By L. O. Howard and Wm. H. Ashmead. Pp. 633-648. Aug. 12, 1896.

1093. An annotated list of birds observed on the Island of Margarita, and at Guanta and Laguayra, Venezuela. By Wirt Robinson, with critical notes and descriptions of new species by Charles W. Richmond. Pp. 649-685, 1 fig., 1 pl. Aug. 12, 1896.

1094. List of Coleoptera collected on the Tana River, and on the Jombene Range, East Africa, by Mr. William Astor Chanler and Lieutenant Ludwig von Höhnel, with descriptions of new genera and species. By Martin L. Linell. Pp. 687-716. Aug. 12, 1896.

1095. Contributions to the natural history of the Commander Islands. XI.—The cranium of Pallas's cormorant. By Frederic A. Lucas. Pp. 717-719, 2 pls. Oct. 7, 1896.

1096. New species of North American Coleoptera of the family Scarabaeidae. By Martin L. Linell. Pp. 721-731. Oct. 7, 1896.

Proc. No.

1097. Observations on the development and migration of the urticating organs of sea nettles, Cnidaria. By Louis Murbach. Pp. 733-740. Oct. 7, 1896.

1098. List of the Lepidoptera collected in East Africa, 1894, by Mr. William Astor Chanler and Lieutenant Ludwig von Höhnel. By W. J. Holland. Pp. 741-767. Oct. 7, 1896.

1099. Notes on the vampire bat *(Diphylla ecaudata)*, with special reference to its relationships with *Desmodus rufus*. By Harrison Allen. Pp. 769-777, 6 figs. Oct. 27, 1896.

1100. Description of a new species of bat of the genus *Glossophaga*. By Harrison Allen. Pp. 779-781. Oct. 27, 1896.

Volume 19

Proceedings of the United States National Museum, vol. 19. Pp. i-viii (title page, advertisement, table of contents, and list of plates); pp. 1-824 (Proceedings papers 1101-1123); pp. 825-864 (index); 53 figs., 5 maps, 48 charts, 68 pls. 1897.

1101. A revision of the American moles. By Frederick W. True. Pp. 1-112, 46 figs., 5 maps, 4 pls, Dec. 21, 1896.

1102. Descriptions of new cynipidous galls and gall-wasps in the United States National Museum. By William H. Ashmead. Pp. 113-136. Dec. 30, 1896.

1103. Preliminary diagnoses of new mammals from the Mexican border of the United States. By Edgar A. Mearns. Pp. 137-140. Dec. 21, 1896. (Advance sheets issued May 25, 1896.)

1104. Description of a new genus and four new species of crabs from the West Indies. By Mary J. Rathbun. Pp. 141-144. Dec. 21, 1896.

1105. A revision of the adult tapeworms of hares and rabbits. By Ch. Wardell Stiles. Pp. 145-235, 21 pls. Dec. 30, 1896.

1106. Contributions to the natural history of the Commander Islands. XII.—Fishes collected at Bering and Copper Islands by Nikolai A. Grebnitski and Leonhard Stejneger. By Tarleton H. Bean and Barton A. Bean. Pp. 237-251. Dec. 30, 1896.

1107. Is the Florida box tortoise a distinct species? By Einar Lönnberg. Pp. 253-254. Dec. 30, 1896.

1108. Summary of the Hemiptera of Japan, presented to the United States National Museum by Professor Mitzukuri. By Philip R. Uhler. Pp. 255-297. Dec. 30, 1896.

1109. On the genus *Remondia*, Gabb, a group of Cretaceous bivalve mollusks. By Timothy W. Stanton. Pp. 299-301, 1 pl. Dec. 30, 1896.

1110. Descriptions of Tertiary fossils from the Antillean region. By R. J. Lechmere Guppy and William Healey Dall. Pp. 303-331, 4 pls. Dec. 30, 1896.

1111. Report on the mollusks collected by the International Boundary Commission of the United States and Mexico, 1892-1894. By William Healey Dall. Pp. 333-379, 3 pls. Jan. 27, 1897.

1112. Notes on fishes collected in Kamchatka and Japan by Leonhard Stejneger and Nicolai A. Grebnitski, with a description of a new blenny. By Tarleton H. Bean and Barton A. Bean. Pp. 381-392, 2 pls. Jan. 27, 1897.

1113. Descriptions of new species of North American Coleoptera in the families Cerambycidae and Scarabaeidae. By Martin L. Linell. Pp. 393-401. Feb. 5, 1897.

1114. Report on the fishes dredged in deep water near the Hawaiian Islands, with descriptions and figures of twenty-three new species. By Charles Henry Gilbert and Frank Cramer. Pp. 403-435, 13 pls. Feb. 5, 1897.

1115. Descriptions of twenty-two new species of fishes collected by the steamer *Albatross*, of the United States Fish Commission. By Charles Henry Gilbert. Pp. 437-457, 7 pls. Feb. 5, 1897.

1116. Birds of the Galapagos Archipelago. By Robert Ridgway. Pp. 459-670, 7 figs., 2 pls., 48 charts. Mar. 15, 1897.

1117. On the fossil phyllopod genera, *Dipeltis* and *Protocaris*, of the family Apodidae. By Charles Schuchert. Pp. 671-676, 1 pl. May 13, 1897.

Proc. No.

1118. Catalogue of a collection of birds made by Doctor W. L. Abbott in Madagascar, with descriptions of three new species. By Charles W. Richmond. Pp. 677-694. May 13, 1897.

1119. On the insects collected by Doctor Abbott on the Seychelles, Aldabra, Glorioso, and Providence Islands, with descriptions of nine new species of Coleoptera. By Martin L. Linell. Pp. 695-706. May 13, 1897.

1120. Cambrian Brachiopoda: Genera *Iphidea* and *Yorkia,* with descriptions of new species of each, and of the genus *Acrothele.* By Charles D. Walcott. Pp. 707-718, 2 pls. Aug. 27, 1897.

1121. Descriptions of six new mammals from North America. By Edgar A. Mearns. Pd. 719-724. July 30, 1897.

1122. The food plants of scale insects (Coccidae). By T. D. A. Cockerell. Pp. 725-785. Aug. 14, 1897.

1123. Notes on larval cestode parasites of fishes. By Edwin Linton. Pp. 787-824, 8 pls. Oct. 4, 1897.

Volume 20

Proceedings of the United States National Museum, vol. 20. Pp. i-xii (title page, advertisement, table of contents, list of illustrations, and errata); pp. 1-901 (Proceedings papers 1124-1139); pp. 903-932 (index); 149 figs., 97 pls. 1898.

1124. Revision of the orthopteran group Melanopli (Acridiidae), with special reference to North American forms. By Samuel Hubbard Scudder. Pp. 1-421, 26 pls. Dec. 28, 1897.

1125. Notes on cestode parasites of fishes. By Edwin Linton. Pp. 423-456, 8 pls. Dec. 24, 1897.

1126. Preliminary diagnoses of new mammals of the genera *Lynx, Urocyon, Spilogale,* and *Mephitis,* from the Mexican boundary line. By Edgar A. Mearns. Pp. 457-461. Dec. 24, 1897. (Advance sheets issued Jan. 12, 1897.)

1127. Description of a new blenny-like fish of the genus *Opisthocentrus,* collected in Vulcano Bay, Port Mororan, Japan, by Nicolai A. Grebnitski. By Tarleton H. Bean and Barton A. Bean. Pp. 463-464, 1 pl. Dec. 24, 1897. (Advance sheets issued Jan. 28, 1897.)

1128. Description of a new crustacean of the genus *Sphaeroma* from a warm spring in New Mexico. Pp. 465-466. Dec. 24, 1897. (Advance sheets issued Feb. 6, 1897.)

1129. Preliminary diagnoses of new mammals of the genera *Mephitis, Dorcelaphus,* and *Dicotyles,* from the Mexican border of the United States. By Edgar A. Mearns. Pp. 467-471. Dec. 24, 1897. (Advance sheets issued Feb. 11, 1897.)

1130. New species of Coleoptera of the family Chrysomelidae, with a short review of the tribe Chlamydini. By Martin L. Linell. Pp. 473-485. Jan. 5, 1898.

1131. Notes on a collection of fishes from the Colorado Basin in Arizona. By Charles Henry Gilbert and Norman Bishop Scofield. Pp. 487-499, 4 pls. Jan. 19, 1898.

1132. Preliminary diagnoses of new mammals of the genera *Sciurus, Castor, Neotoma,* and *Sigmodon,* from the Mexican border of the United States. By Edgar A. Mearns. Pp. 501-505. Jan. 19, 1898. (Advance sheets issued Mar. 5, 1897.)

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1134. Contributions to Philippine ornithology. Part I.—A list of the birds known to inhabit the Philippine and Palawan Islands, showing their distribution within the limits of the two groups. By Dean C. Worcester and Frank S. Bourns. Part II.—Notes on the distribution of Philippine birds. By Dean C. Worcester. Pp. 549-625, 7 pls. Feb. 17, 1898.

1135. Supplement to the annotated catalogue of the published writings of Charles Abiathar White, 1886-1897. By Timothy W. Stanton. Pp. 627-642. Feb. 12, 1898.

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1136. Observations on the Astacidae in the United States National Museum and in the Museum of Comparative Zoology, with descriptions of new species. By Walter Faxon. Pp. 643-694, 9 pls. Feb. 17, 1898.

1137. A revision of tropical African Diplopoda of the family Strongylosomatidae. By O. F. Cook. Pp. 695-708. Mar. 8, 1898.

1138. American leaf-hoppers of the subfamily Typhlocybinae. By Clarence P. Gillette. Pp. 709-773, 149 figs. Apr. 20, 1898.

1139. Revision of the deep-water Mollusca of the Atlantic coast of North America, with descriptions of new genera and species. Part I.—Bivalvia. By Addison E. Verrill and Katherine J. Bush. Pp. 775-901, 27 pls. June 15, 1898.

Volume 21

Proceedings of the Unted States National Museum, vol. 21. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); pp. 1-901 (Proceedings papers 1140-1178); pp. 903-933 (index); 105 figs., 89 pls. 1899.

1140. Contributions toward a monograph of the lepidopterous family Noctuidae of boreal North America. A revision of the species of *Acronycta* (Ochsenheimer) and of certain allied genera. By John B. Smith and Harrison G. Dyar. Pp. 1-194, 22 pls. Nov. 17, 1898.

1141. Descriptions of the species of *Cycadeoidea*, or fossil cycadean trunks, thus far determined from the Lower Cretaceous rim of the Black Hills. By Lester F. Ward. Pp. 195-229. Oct. 29, 1898.

1142. On some new parasitic insects of the subfamily Encyrtinae. By L. O. Howard. Pp. 231-248. Oct. 4, 1898.

1143. On the coleopterous insects of Galapagos Islands. By Martin L. Linell. Pp. 249-268. Oct. 4, 1898.

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1145. Description of a species of *Actaeon* from the Quaternary bluffs at Spanish Bight, San Diego, California. By Robert E. C. Stearns. Pp. 297-299, 1 fig. Nov. 2, 1898.

1146. Report on a collection of Japanese Diptera, presented to the U. S. National Museum by the Imperial University of Tokyo. By D. W. Coquillett. Pp. 301-340. Nov. 4, 1898.

1147. Notes on the mammals of the Catskill Mountains, New York, with general remarks on the fauna and flora of the region. By Edgar A. Mearns. Pp. 341-360, 6 figs. Nov. 4, 1898.

1148. Topaz crystals in the mineral collection of the U. S. National Museum. By Arthur S. Eakle. Pp. 361-369, 22 figs. Nov. 10, 1898.

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Volume 22

Proceedings of the United States National Museum, vol. 22. Pp. i-xii (title page, advertisement, table of contents, list of illustrations, and errata); pp. 1-1044 (Proceedings papers 1179-1205); pp. 1045-1075 (index); 15 figs., 18 pls. 1900.

1179. The osteological characters of the fishes of the suborder Percesoces. By Edwin Chapin Starks. Pp. 1-10, 3 pls. Oct. 7, 1899.

1180. Notes on birds from the Cameroons district, West Africa. By Harry C. Oberholser. Pp. 11-19. Oct. 7, 1899.

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1189. Description of a new species of *Idotea* from Hakodate Bay, Japan. By Harriet Richardson. Pp. 131-134, 6 figs. Feb. 2, 1900.

1190. List of shells collected by Vernon Bailey in Heron and Eagle Lakes, Minnesota, with notes. By Robert E. C. Stearns. Pp. 135-138. Apr. 7, 1900.

1191. Description of a new variety of *Haliotis* from California, with faunal and geographical notes. By Robert E. C. Stearns. Pp. 139-142. Apr. 7, 1900.

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1198. Report on a collection of dipterous insects from Puerto Rico. By D. W. Coquillett. Pp. 249-270. May 12, 1900.

1199. The decapod crustaceans of West Africa. By Mary J. Rathbun. Pp. 271-316, 2 figs. May 12, 1900.

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1201. Descriptions of three new birds from Lower Siam. By Charles W. Richmond. Pp. 319-321. May 12, 1900.

1202. On the genera of the chalcid-flies belonging to the subfamily Encyrtinae. By William H. Ashmead. Pp. 323-412. June 5, 1900.

1203. A hundred new moths of the family Noctuidae. By John B. Smith. Pp. 413-495. July 14, 1900.

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1205. Synopsis of the naiades, or pearly fresh-water mussels. By Charles Torrey Simpson. Pp. 501-1044, 1 pl. Oct. 8, 1900.

Volume 23

Proceedings of the United States National Museum, vol. 23. Pp. i-xv (title page, advertisement, table of contents, list of illustrations, and errata); pp. 1-913 (Proceedings papers 1206-1240); pp. 915-952 (index); 82 figs., 42 pls. 1901.

1206. Classification of the ichneumon flies, or the superfamily Ichneumonoidea. By William H. Ashmead. Pp. 1-220. Oct. 13, 1900.

1207. A new rhinoceros, *Trigonias osborni*, from the Miocene of South Dakota. By Frederic A. Lucas. Pp. 221-224, 2 figs. Oct. 9, 1900.

1208. New species of moths of the superfamily Tineina from Florida. By August Busck. Pp. 225-254, 1 pl. Oct. 15, 1900.

1209. Life histories of some North American moths. By Harrison G. Dyar. Pp. 255-284. Oct. 15, 1900.

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1212. A new fossil cyprinoid, *Leuciscus turneri*, from the Miocene of Nevada. By Frederic A. Lucas. Pp. 333-334, 1 pl. Nov. 8, 1900.

1213. A list of fishes collected in Japan by Keinosuke Otaki, and by the United States steamer *Albatross*, with descriptions of fourteen new species. By David Starr Jordan and John Otterbein Snyder. Pp. 335-380, 12 pls. Dec. 10, 1900.

1214. Synopsis of the family Cardiidae and of the North American species. By William Healey Dall. Pp. 381-392. Jan. 2, 1901.

1215. Revision of the orthopteran genus *Trimerotropis*. By Jerome McNeill. Pp. 393-449, 1 pl. Jan. 19, 1901.

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1217. On a new species of spiny-tailed iguana from Utilla Island, Honduras. By Leonhard Stejneger. Pp. 467-468. Jan. 19, 1901.

1218. A new systematic name for the yellow boa of Jamaica. By Leonhard Stejneger. Pp. 469-470. Jan. 19, 1901.

1219. Dlagnosis of a new species of iguanoid lizard from Green Cay, Bahama Islands. By Leonhard Stejneger. P. 471. Jan. 19, 1901.

1220. On the wheatears (*Saxicola*) occurring in North America. By Leonard Stejneger. Pp. 473-481, 1 fig. Feb. 25, 1901.

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1226. A list of the ferns and fern allies of North America north of Mexico, with principal synonyms and distribution. By William R. Maxon. Pp. 619-651. May 4, 1901.

1227. A systematic arrangement of the families of the Diptera. By D. W. Coquillett. Pp. 653-658. May 2, 1901.

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1229. Cambrian Brachiopoda: *Obolella*, subgenus *Glyptias; Bicia; Obolus*, subgenus *Westonia;* with descriptions of new species. By Charles D. Walcott. Pp. 669-695. May 22, 1901.

1230. A revision of certain species of plants of the genus *Antennaria*. By Elias Nelson. Pp. 697-713. June 4, 1901.

1231. Description of a new species of snake from Clarion Island, west coast of Mexico. By Leonhard Stejneger. Pp. 715-717. June 5, 1901.

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1234. The proper names of *Bdellostoma* or *Heptatrema*. By Theodore Gill. Pp. 735-738. June 6, 1901.

Proc. No.

1235. List of fishes collected in 1883 and 1885 by Pierre Louis Jouy and preserved in the United States National Museum, with descriptions of six new species. By David Starr Jordan and John Otterbein Snyder. Pp. 739-769, 8 pls. July 2, 1901.

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1239. A review of the apodal fishes or eels of Japan, with descriptions of nineteen new species. By David Starr Jordan and John Otterbein Snyder. Pp. 837-890, 22 figs. Aug. 28, 1901.

1240. A review of the cardinal fishes of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 891-913, 10 figs., 2 pls. Oct. 2, 1901.

Volume 24

Proceedings of the United States National Museum, vol. 24. Pp. i-xv (title page, advertisement, table of contents, and list of illustrations); pp. 1-926 (Proceedings papers 1241-1274); pp. 927-971 (index); 124 figs., 56 pls. 1902.

1241. A review of the hypostomide and lophobranchiate fishes of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 1-20, 12 pls. Oct. 27, 1901.

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1244. A review of the gobioid fishes of Japan, with descriptions of twenty-one new species. By David Starr Jordan and John Otterbein Snyder. Pp. 33-132, 33 figs. Sept. 25, 1901.

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1246. An annotated list of mammals collected in the vicinity of La Guaira, Venezuela. By Wirt Robinson and Marcus Ward Lyon, Jr. Pp. 135-162. Oct. 3, 1901.

1247. An annotated list of birds collected in the vicinity of La Guaira, Venezuela. By Wirt Robinson and Charles W. Richmond. Pp. 163-178. Oct. 3, 1901.

1248. An annotated list of batrachians and reptiles collected in the vicinity of La Guaira, Venezuela, with descriptions of two new species of snakes. By Leonhard Stejneger. Pp. 179-192, 33 figs. Oct. 3, 1901.

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Proc. No.

1257. *Chondrodonta,* a new genus of ostreiform mollusks from the Cretaceous, with descriptions of the genotype and a new species. By Timothy W. Stanton. Pp. 301-307, 2 pls. Dec. 30, 1901.

1258. Catalogue of a collection of hummingbirds from Ecuador and Colombia. By Harry C. Oberholser. Pp. 309-342. Jan. 19, 1902.

1259. A review of the discobolous fishes of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 343-351, 2 figs. Feb. 10, 1902.

1260. A review of the Japanese species of surf-fishes or Embiotocidae. By David Starr Jordan (assisted by Michitaro Sindo). Pp. 353-359, 2 figs. Feb. 26, 1902.

1261. A review of the pediculate fishes or anglers of Japan. By David Starr Jordan (assisted by Michitaro Sindo). Pp. 361-381, 7 figs. Feb. 26, 1902.

1262. Descriptions of new American butterflies. By William Schaus. Pp. 383-460. Mar. 1, 1902.

1263. A review of the trachinoid fishes and their supposed allies found in the waters of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 461-497, 7 figs. Mar. 28, 1902.

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1266. A review of the labroid fishes and related forms found in the waters of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 595-662, 10 figs. May 2, 1902.

1267. List of generic terms proposed for birds during the years 1890 to 1900, inclusive, to which are added names omitted by Waterhouse in his "Index Generum Avium." By Charles W. Richmond. Pp. 663-730. May 2, 1902.

1268. A review of the American moths of the genus *Depressaria* Haworth, with descriptions of new species. By August Busck. Pp. 731-749. May 12, 1902.

1269. The mammals of the Andaman and Nicobar Islands. By Gerrit S. Miller, Jr. Pp. 751-795, 2 pls. May 29, 1902.

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1273. A newly found meteorite from Admire, Lyon County, Kansas. By George P. Merrill. Pp. 907-913, 7 pls. May 31, 1902.

1274. Descriptions of three new birds from the southern United States. By Edgar A. Mearns. Pp. 915-926. June 2, 1902.

Volume 25

Proceedings of the United States National Museum, vol. 25. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); pp. 1-959 (Proceedings papers 1275-1305); pp. 961-1021 (index); 144 figs., 32 pls. 1903.

1275. A list of the beetles of the District of Columbia. By Henry Ulke. Pp. 1-57. Sept. 2, 1902.

1276. Some new South American birds. By Harry C. Oberholser. Pp. 59-68. Aug. 30, 1902.

1277. The Casas Grandes meteorite. By Wirt Tassin. Pp. 69-74, 4 pls. Sept. 2, 1902.

1278. A review of the oplegnathoid fishes of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 75-78. Aug. 30, 1902.

1279. Descriptions of two new species of squaloid sharks from Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 79-81, 2 figs. Sept. 2, 1902.

Proc. No.

1280. New Diptera from North America. By D. W. Coquillett. Pp. 83-126. Sept. 12, 1902.

1281. List of birds collected by William T. Foster in Paraguay. By Harry C. Oberholser. Pp. 127-147. Sept. 8, 1902.

1282. The reptiles of the Huachuca Mountains, Arizona. By Leonhard Stejneger. Pp. 149-158. Sept. 8, 1902.

1283. Contributions toward a monograph of the lepidopterous family Noctuidae of Boreal North America. A revision of the moths referred to the genus *Leucania,* with descriptions of new species. By John B. Smith. Pp. 159-209, 2 pls. Sept. 3, 1902.

1284. A list of spiders collected in Arizona by Messrs. Schwarz and Barber during the summer of 1901. By Nathan Banks. Pp. 211-221, 1 pl. Sept. 10, 1902.

1285. Observations on the crustacean fauna of the region about Mammoth Cave, Kentucky. By William Perry Hay. Pp. 223-236, 1 pl. Sept. 12, 1902.

1286. The ocelot cats. By Edgar A. Mearns. Pp. 237-249. Sept. 17, 1902.

1287. A review of the trigger-fishes, file-fishes, and trunk-fishes of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 251-286, 6 figs. Sept. 17, 1902.

1288. Birds collected by Dr. W. L. Abbott and Mr. C. B. Kloss in the Andaman and Nicobar Islands. By Charles W. Richmond. Pp. 287-314. Sept. 17, 1902.

1289. Notes on a collection of fishes from the Island of Formosa. By David Starr Jordan and Barton Warren Evermann. Pp. 315-368, 29 figs. Sept. 24, 1902.

1290. Descriptions of the larvae of some moths from Colorado. By Harrlson G. Dyar. Pp. 369-412. Sept. 23, 1902.

1291. A review of the cling-fishes (Gobiesocidae) of the waters of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 413-416, 1 fig. Sept. 19, 1902.

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1295. A new terrestrial isopod of the genus *Pseudarmadillo* from Cuba. By Harriet Richardson. Pp. 509-511, 4 figs. Sept. 25, 1902.

1296. A review of the Chaetodontidae and related families of fishes found in the waters of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 513-563, 6 figs. Sept. 30, 1902.

1297. The relationship and osteology of the caproid fishes or Antigoniidae. By Edwin Chapin Starks. Pp. 565-572, 3 figs. Sept. 25, 1902.

1298. Notes on little-known Japanese fishes with description of a new species of *Aboma.* By David Starr Jordan and Henry W. Fowler. Pp. 573-576, 1 fig. Oct. 2, 1902.

1299. Cambrian Brachiopoda *Acrotreta; Linnarssonella; Obolus;* with descriptions of new species. By Charles D. Walcott. Pp. 577-612. Nov. 3, 1902.

1300. On certain species of fishes confused with *Bryostemma polyactocephalum.* By David Starr Jordan and John Otterbein Snyder. Pp. 613-618, 3 figs. Nov. 4, 1902.

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1303. A review of the ophidioid fishes of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 743-766, 6 figs. Dec. 2, 1902.

1304. A revision of the American moths of the family Gelechiidae, with descriptions of new species. By August Busck. Pp. 767-938, 1 fig., 5 pls. May 9, 1903.

1305. A review of the dragonets (Callionymidae) and related fishes of the waters of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 939-959. 9 figs. May 9, 1903.

Volume 26

Proceedings of the United States National Museum, vol. 26. Pp. i-xv (title page, advertisement, table of contents, and list of illustrations); pp. 1-1016 (Proceedings papers 1306-1349); pp. 1017-1058 (index); 193 figs., 69 pls. 1903.

Proc. No.

1306. A review of the berycoid fishes of Japan. By David Starr Jordan and Henry W. Fowler. Pp. 1-21, 4 figs. Nov. 25, 1902.

1307. Japanese stalk-eyed crustaceans. By Mary J. Rathbun. Pp. 23-55, 24 figs. Nov. 28, 1902.

1308. A review of the hemibranchiate fishes of Japan. By David Starr Jordan and Edwin Chapin Starks. Pp. 57-73, 3 figs. Dec. 2, 1902.

1309. Descriptions of new species of Hawaiian crabs. By Mary J. Rathbun. Pp. 75-77, 4 figs. Nov. 18, 1902.

1310. Contribution to a monograph of the insects of the order Thysanoptera inhabiting North America. By Warren Elmer Hinds. Pp. 79-242, 11 pls. Dec. 20, 1902.

1311. Descriptions of a new genus and forty-six new species of crustaceans of the family Galatheidae, with a list of the known marine species. By James E. Benedict. Pp. 243-334, 47 figs. Dec. 29, 1902.

1312. Synopsis of the family Veneridae and of the North American Recent species. By William Healey Dall. Pp. 335-412, 5 pls. Dec. 29, 1902.

1313. On the lower Devonic and Ontaric formations of Maryland. By Charles Schuchert. Pp. 413-424. Feb. 3, 1903.

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1315. Note on the sea anemone, *Sagartia paguri* Verrill. By J. Playfair McMurrich. Pp. 427-428, 2 figs. Jan. 27, 1903.

1316. On a small collection of crustaceans from the Island of Cuba. By William Perry Hay. Pp. 429-435, 3 figs. Feb. 2, 1903.

1317. Mammals collected by Dr. W. L. Abbott on the coast and islands of northwest Sumatra. By Gerrit S. Miller, Jr. Pp. 437-483, 1 fig., 2 pls. Feb. 3, 1903.

1318. Birds collected by Dr. W. L. Abbott on the coast and islands of northwest Sumatra. By Charles W. Richmond. Pp. 485-524, 1 fig. Feb. 4, 1903.

1319. A review of the synentognathous fishes of Japan. By David Starr Jordan and Edwin Chapin Starks. Pp. 525-544, 3 figs. Feb. 4, 1903.

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1323. The structural features of the bryozoan genus *Homotrypa,* with descriptions of species from the Cincinnatian group. By Ray S. Bassler. Pp. 565-591, 6 pls. March 28, 1903.

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Proc. No.

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1346. On some fish genera of the first edition of Cuvier's Règne Animal and Oken's names. By Theodore Gill. Pp. 965-967. July 11, 1903.

1347. Report of the fresh-water Ostracoda of the United States National Museum, including a revision of the subfamilies and genera of the family Cyprididae. By Richard W. Sharpe. Pp. 969-1001, 6 pls. July 15, 1903.

1348. A review of the fishes of Japan belonging to the family of Hexagrammidae. By David Starr Jordan and Edwin Chapin Starks. Pp. 1003-1013, 3 figs. July 15, 1903.

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Proceedings of the United States National Museum, vol. 27. Pp. i-xvii (title page, advertisement, table of contents, and list of illustrations); pp. 1-961 (Proceedings papers 1350-1381); pp. 963-998 (index); 270 figs., 50 pls. 1904.

1350. Contributions to the natural history of the Isopoda. By Harriet Richardson. Pp. 1-89, 92 figs. Jan. 19, 1904.

1351. A review of the scorpaenoid fishes of Japan. By David Starr Jordan and Edwin Chapin Starks. Pp. 91-175, 21 figs., 2 pls. Jan. 22, 1904.

1352. A revision of the American great horned owls. By Harry C. Oberholser. Pp. 177-192. Jan. 22, 1904.

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1354. A review of the wrens of the genus *Troglodytes*. By Harry C. Oberholser. Pp. 197-210, 1 pl. Jan. 23, 1904.

Proc. No.

1355. Report on the fresh-water Bryozoa of the United States. By Charles B. Davenport. Pp. 211-221, 1 pl. Jan. 22, 1904.

1356. On the species of white *Chimaera* from Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 223-226, 2 figs. Jan. 23, 1904.

1357. Notes on a killer whale (genus *Orcinus*) from the coast of Maine. By Frederick W. True. Pp. 227-230, 2 pls. Jan. 27, 1904.

1358. A review of the Cottidae or sculpins found in the waters of Japan. By David Starr Jordan and Edwin Chapin Starks. Pp. 231-335, 43 figs. Jan. 28, 1904.

1359. Notes on the bats collected by William Palmer in Cuba. By Gerrit S. Miller, Jr. Pp. 337-348, 1 pl. Jan. 23, 1904.

1360. List of Hemiptera-Heteroptera of Las Vegas Hot Springs, New Mexico, collected by Messrs. E. A. Schwarz and Herbert S. Barber. By Philip R. Uhler. Pp. 349-364. Jan. 27, 1904.

1361. A revision of American Siphonaptera, or fleas, together with a complete list and bibliography of the group. By Carl F. Baker. Pp. 365-469, 17 pls. Feb. 16, 1904.

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1364. Studies in American mantids or soothsayers. By James A. G. Rehn. Pp. 561-574. Feb. 6, 1904.

1365. A review of the Japanese fishes of the family of Agonidae. By David Starr Jordan and Edwin Chapin Starks. Pp. 575-599, 13 figs. Feb. 23, 1904.

1366. The osteology of some berycoid fishes. By Edwin Chapin Starks. Pp. 601-619, 10 figs. Feb. 18, 1904.

1367. A new genus and two new species of crustaceans of the family Albuneidae from the Pacific Ocean; with remarks on the probable use of the antennulae in *Albunea* and *Lepidopa*. By James E. Benedict. Pp. 621-625, 5 figs. Feb. 16, 1904.

1368. A new species of *Argulus*, with a more complete account of two species already described. By Charles Branch Wilson. Pp. 627-655, 38 figs. Apr. 9, 1904.

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1370. Description of a new African weaver-bird. By Harry C. Oberholser. P. 683. Apr. 13, 1904.

1371. New dragon-fly nymphs in the United States National Museum. By James G. Needham. Pp. 685-720, 11 figs., 7 pls. May 20, 1904.

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1376. The Lepidoptera of the Kootenai District of British Columbia. By Harrison G. Dyar. Pp. 779-938. June 7, 1904.

1377. Notes on collections of fishes from Oahu Island and Laysan Island, Hawaii, with descriptions of four new species. By David Starr Jordan and John Otterbein Snyder. Pp. 939-948. June 2, 1904.

1378. Two Orthoptera hitherto unrecorded from the United States. By Andrew Nelson Caudell. Pp. 949-952, 3 figs. June 2, 1904.

1379. A new fern, *Goniophlebium pringlei*, from Mexico. By William R. Maxon. Pp. 953-954, 1 fig., 1 pl. June 27, 1904.

1380. The Persimmon Creek meteorite. By Wirt Tassin. Pp. 955-959, 1 fig., 2 pls. June 27, 1904.

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1381. *Schmidtina,* a genus of Japanese sculpins. By David Starr Jordan and Edwin Chapin Starks. P. 961. June 27, 1904.

Volume 28

Proceedings of the United States National Museum, vol. 28. Pp. i-xix (title page, advertisement, table of contents, and list of illustrations); pp. 1-987 (Proceedings papers 1382-1414); pp. 989-1027 (index); 380 figs., 35 pls. 1905.

1382. A treatise on the Acarina, or mites. By Nathan Banks. Pp. 1-114, 201 figs. Sept. 24, 1904.

1383. Notes on Hawaiian reptiles from the Island of Maui. By Richard C. McGregor. Pp. 115-118. Sept. 24, 1904.

1384. *Labracinus* the proper name for the fish genus *Cichlops.* By Theodore Gill. P. 119. Oct. 5, 1904.

1385. Note on the genus *Prionurus* or *Acanthocaulos.* By Theodore Gill. P. 121. Oct. 5, 1904.

1386. Description of a new species of fish *(Apogon evermanni)* from the Hawaiian Islands, with notes on other species. By David Starr Jordan and John Otterbein Snyder. Pp. 123-126. Oct. 6, 1904.

1387. Descriptions of new genera and species of Hymenoptera from the Philippine Islands. By William H. Ashmead. Pp. 127-158, 2 pls. Nov. 5, 1904.

1388. On the systematic relations of the ammodytoid fishes. By Theodore Gill. Pp. 159-163, 4 figs. Nov. 12, 1904.

1389. The dragonflies (Odonata) of Burma and Lower Siam. I.—Subfamily Calopteryginae. By Edward Bruce Williamson. Pp. 165-187, 18 figs. Apr. 22, 1905.

1390. On the *Liparis (Trismegistus) owstoni* Jordan and Snyder. By Peter Schmidt. Pp. 189-191, 2 figs. Nov. 29, 1904.

1391. On a collection of fishes made in Korea, by Pierre Louis Jouy, with descriptions of new species. By David Starr Jordan and Edwin Chapin Starks. Pp. 193-212, 11 figs. Feb. 23, 1905.

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1397. Three new frogs and one new gecko from the Philippine Islands. By Leonhard Stejneger. Pp. 343-348. Feb. 15, 1905.

1398. Descriptions of new species of tortricid moths, from North Carolina, with notes. By William Dunham Kearfott. Pp. 349-364. Apr. 22, 1905.

1399. Note on the salmon and trout of Japan. By David Starr Jordan. Pp. 365-366. May 9, 1905.

1400. Descriptions of a new genus of Isopoda belonging to the family Tanaidae and of a new species of *Tanais,* both from Monterey Bay, California. By Harriet Richardson. Pp. 367-370, 13 figs. May 9, 1905.

1401. A critical review of the literature on the simple genera of the Madreporaria Fungida, with a tentative classification. By T. Wayland Vaughan. Pp. 371-424. May 10, 1905.

1402. Descriptions of new genera and species of mammals from the Philippine Islands. By Edgar A. Mearns. Pp. 425-460. May 13, 1905.

1403. On a collection of Orthoptera from southern Arizona, with descriptions of new species. By Andrew Nelson Caudell. Pp. 461-477, 6 figs. June 12, 1905.

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1404. North American parasitic copepods belonging to the family Caligidae. Part I.—The Caliginae. By Charles Branch Wilson. Pp. 479-672, 51 figs., 25 pls. June 23, 1905.

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1406. Description of a new toad from Cuba. By Leonhard Stejneger. Pp. 765-767, 6 figs. June 24, 1905.

1407. List of fishes collected by Dr. Bashford Dean on the Island of Negros, Philippines. By David Starr Jordan and Alvin Seale. Pp. 769-803, 20 figs. July 3, 1905.

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1411. Birds collected by Dr W. L. Abbott in the Kilimanjaro region, East Africa. By Harry C. Oberholser. Pp. 823-936. July 8, 1905.

1412. A descriptive list of a collection of early stages of Japanese Lepidoptera. By Harrison G. Dyar. Pp. 937-956, 23 figs. July 8, 1905.

1413. Additions to the recorded hymenopterous fauna of the Philippine Islands, with descriptions of new species. By William H. Ashmead. Pp. 957-971. July 8, 1905.

1414. Notes on the fishes of Puget Sound. By Charles H. Gilbert and Joseph C. Thompson. Pp. 973-987, 3 figs. Aug. 8, 1905.

Volume 29

Proceedings of the United States National Museum, vol. 29. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); pp. 1-820 (Proceedings papers 1415-1441); pp. 821-840 (index); 143 figs., 44 pls. 1906.

1415. Cambrian faunas of China. By Charles D. Walcott. Pp. 1-106. Sept. 6, 1905.

1416. New Hymenoptera from the Philippines. By William H. Ashmead. Pp. 107-119. Oct. 5, 1905.

1417. The classification of the American Siphonaptera. By Carl F. Baker. Pp. 121-170. Oct. 3, 1905.

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1419. New genera of South American moths. By Harrison G. Dyar. Pp. 173-178. Oct. 12, 1905.

1420. Descriptions of new South American moths. By William Schaus. Pp. 179-345. Oct. 11, 1905.

1421. Some new South American moths. By William Warren. Pp. 347-352. Oct. 6, 1905.

1422. A list of fishes collected in Tahiti by Mr. Henry P. Bowie. By David Starr Jordan and John Otterbein Snyder. Pp. 353-357, 3 figs. Oct. 7, 1905.

1423. List of American cochlidian moths, with descriptions of new genera and species. By Harrison G. Dyar. Pp. 359-396. Oct. 12, 1905.

1424. New genera and species of Hymenoptera from the Philippines. By William H. Ashmead. Pp. 397-413. Oct. 5, 1905.

1425. Thomas Martyn and the Universal Conchologist. By William Healey Dall. Pp. 415-432. Oct. 6, 1905.

1426. The mounted skeleton of *Triceratops prorsus.* By Charles W. Gilmore. Pp. 433-435, 2 pls. Oct. 4, 1905.

1427. Five new species of Mexican plants. By J. N. Rose. Pp. 437-439. Sept. 30, 1905.

1428. Two new umbelliferous plants from the Coastal Plain of Georgia. By J. N. Rose. Pp. 441-442, 1 pl. Oct. 5, 1905.

Proc. No.

1429. Descriptions of three Mexican violets. By J. N. Rose and H. D. House. Pp. 443-444, 1 pl. Oct. 6, 1905.

1430. Description of a new species of *Livoneca* from the coast of Panama. By Harriet Richardson. Pp. 445-446, 2 figs. Dec. 2, 1905.

1431. The breeding habits and the segmentation of the egg of the pipefish, *Siphostoma floridae*. By Eugene Willis Gudger. Pp. 447-500, 2 figs., 7 pls. Dec. 6, 1905.

1432. Notes on exotic forficulids or earwigs, with descriptions of new species. By James A. G. Rehn. Pp. 501-515, 9 figs. Dec. 2, 1905.

1433. List of fishes collected in 1882-83 by Pierre Louis Jouy at Shanghai and Hongkong, China. By David Starr Jordan and Alvin Seale. Pp. 517-529, 6 figs. Dec. 6, 1905.

1434. On the syntomid moths of southern Venezuela collected in 1898-1900. By Edward A. Klages. Pp. 531-552. Jan. 31, 1906.

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1437. A new lizard of the genus *Phrynosoma,* from Mexico. By Leonhard Stejneger. Pp. 565-567. Feb. 2, 1906.

1438. A study of the wings of the Tenthredinoidea, a superfamily of Hymenoptera. By Alexander Dyer MacGillivray. Pp. 569-654, 20 figs., 24 pls. Feb. 10, 1906.

1439. A new blattoid from the Cretaceous formation of North America. By Anton Handlirsch. Pp. 655-656, 1 fig. Mar. 7, 1906.

1440. On some bats of the genus *Rhinolophus,* collected by Dr. W. L. Abbott in the Islands of Nias and Engano. By Knud Andersen. Pp. 657-659. Mar. 7, 1906.

1441. Revision of American Paleozoic insects. By Anton Handlirsch. Pp. 661-820, 109 figs. Mar. 7, 1906.

Volume 30

Proceedings of the United States National Museum, vol. 30. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); pp. 1-855 (Proceedings papers 1442-1478); pp. 857-883 (index); 120 figs., 78 pls. 1906.

1442. A study of the James types of Ordovician and Silurian Bryozoa. By Ray S. Bassler. Pp. 1-66, 7 pls. Apr. 2, 1906.

1443. The life history of the cave salamander, *Spelerpes maculicaudus* (Cope). By Arthur M. Banta and Waldo L. McAtee. Pp. 67-83, 3 figs., 3 pls. Apr. 2, 1906.

1444. Descriptions of new South American moths. By William Schaus. Pp. 85-141. Apr. 2, 1906.

1445. Descriptions of six new species of fishes from Japan. By David Starr Jordan and Alvin Seale. Pp. 143-148, 6 figs. Apr. 4, 1906.

1446. New American Paleozoic Ostracoda. Notes and descriptions of Upper Carboniferous genera and species. By Edward O. Ulrich and Ray S. Bassler. Pp. 149-164, 1 pl. Apr. 4, 1906.

1447. A new ruminant from the Pleistocene of New Mexico. By James Williams Gidley. Pp. 165-167, 3 figs. Apr. 4, 1906.

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1451. Brains and brain preservatives. By Aleš Hrdlička. Pp. 245-320b, 27 figs. June 4, 1906.

1452. Notes on Japanese, Indopacific, and American Pyramidellidae. By William Healey Dall and Paul Bartsch. Pp. 321-369, 10 pls. May 9, 1906.

Proc. No.

1453. Notes on South American grasshoppers of the subfamily Acridinae (Acrididae), with descriptions of new genera and species. By James A. G. Rehn. Pp. 371-391. May 9, 1906.

1454. Descriptions of two new naiads. By Paul Bartsch. Pp. 393-395, 3 pls. May 9, 1906.

1455. A synopsis of the sturgeons (Acipenseridae) of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 397-398. May 9, 1906.

1456. Descriptions of new genera and species of South American geometrid moths. By William Warren. Pp. 399-557. May 11, 1906.

1457. A new salamander from North Carolina. By Leonhard Stejneger. Pp. 559-562, 6 figs. May 22, 1906.

1458. Cambrian faunas of China. By Charles D. Walcott. Pp. 563-595. May 23, 1906.

1459. Descriptions of three new species of katydids and a new genus of crickets from Costa Rica. By James A. G. Rehn. Pp. 597-605, 8 figs. May 24, 1906.

1460. Notes on some recent additions to the exhibition series of vertebrate fossils. By Charles W. Gilmore. Pp. 607-611, 6 pls. May 31, 1906.

1461. Synoptic list of Paraguayan Acrididae, or locusts, with descriptions of new forms. By Lawrence Bruner. Pp. 613-694, 3 pls. June 5, 1906.

1462. List of fishes collected on Tanega and Yaku, offshore islands of southern Japan, by Robert Van Vleck Anderson, with descriptions of seven new species. By David Starr Jordan and Edwin Chapin Starks. Pp. 695-706, 13 figs. June 4, 1906.

1463. A review of the American moths of the genus *Cosmopteryx* Hübner. By August Busck. Pp. 707-713. June 4, 1906.

1464. A review of the sand lances or Ammodytidae of the waters of Japan. By David Starr Jordan. Pp. 715-719, 2 figs. June 4, 1906.

1465. Tineid moths from southern Texas, with descriptions of new species. By August Busck. Pp. 721-736, 10 figs. June 4, 1906.

1466. Notes on Malayan pigs. By Gerrit S. Miller, Jr. Pp. 737-758, 1 fig., 26 pls. June 13, 1906.

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1469. Notes on birds from German and British East Africa. By Harry C. Oberholser. Pp. 801-811. June 4, 1906.

1470. Description of a new species of threadfin (family Polynemidae) from Japan. By David Starr Jordan and Richard Crittenden McGregor. Pp. 813-815, 1 fig. June 4, 1906.

1471. A new tree toad from Costa Rica. By Leonhard Stejneger. Pp. 817-818. June 4, 1906.

1472. The mammals of Engano Island, West Sumatra. By Gerrit S. Miller, Jr. Pp. 819-825. June 4, 1906.

1473. Three new Fungiae, with a description of a specimen of *Fungia granulosa* Klunzinger and a note on a specimen of *Fungia concinna* Verrill. By T. Wayland Vaughan. Pp. 827-832, 8 pls. June 20, 1906.

1474. On a species of loach; *Misgurnus decemcirrosus* (Basilewsky) from northern China. By David Starr Jordan and John Otterbein Snyder. Pp. 833-834, 1 fig. June 16, 1906.

1475. Description of a new genus and species of fossil seal from the Miocene of Maryland. By Frederick W. True. Pp. 835-840, 2 pls. June 16, 1906.

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1478. New fishes from Santo Domingo. By Barton W. Evermann and H. Walton Clark. Pp. 851-855, 3 figs. June 27, 1906.

Volume 31

Proceedings of the United States National Museum, vol. 31. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); pp. 1-720 (Proceedings papers 1479-1504); pp. 721-739 (index); 139 figs., 20 pls. 1907.

Proc. No.

1479. Descriptions of new isopod crustaceans of the family Sphaeromidae. By Harriet Richardson. Pp. 1-22, 27 figs. July 23, 1906.

1480. Schizopod crustaceans in the U. S. National Museum. The families Lophogastridae and Eucopiidae. By Arnold E. Ortmann. Pp. 23-54, 2 pls. July 23, 1906.

1481. Mammals collected by Dr. W. L. Abbott in the Karimata Islands, Dutch East Indies. By Gerrit S. Miller, Jr. Pp. 55-66, 1 fig. July 23, 1906.

1482. Notes on a collection of fishes from Argentina, South America, with descriptions of three new species. By Barton Warren Evermann and William Converse Kendall. Pp. 67-108, 4 figs. July 25, 1906.

1483. The urocoptid mollusks from the mainland of America in the collection of the United States National Museum. By Paul Bartsch. Pp. 109-160, 16 figs., 3 pls. Sept. 10, 1906.

1484. A review of the flounders and soles of Japan. By David Starr Jordan and Edwin Chapin Starks. Pp. 161-246, 27 figs. Sept. 10, 1906.

1485. The mammals collected by Dr. W. L. Abbott in the Rhio-Linga Archipelago. By Gerrit S. Miller, Jr. Pp. 247-286, 1 fig. Sept. 11, 1906.

1486. A review of the Poeciliidae or killifishes of Japan. By David Starr Jordan and John Otterbein Snyder. Pp. 287-290, 1 fig. Sept. 10, 1906.

1487. The digger wasps of North America and the West Indies belonging to the subfamily Chlorioninae. By Henry T. Fernald. Pp. 291-423, 5 pls. Sept. 20, 1906.

1488. On the diurnal Lepidoptera of the Athabaska and MacKenzie Region, British America. By Merritt Cary. Pp. 425-457. Sept. 24, 1906.

1489. List of fishes collected in Japan in 1903, with descriptions of new genera and species. By Hugh M. Smith and Thomas E. B. Pope. Pp. 459-499, 12 figs. Sept. 24, 1906.

1490. A new Costa Rican amphipod. By Thomas R. R. Stebbing. Pp. 501-504, 2 figs., 1 pl. Sept. 24, 1906.

1491. Fishes collected in the Philippine Islands by Maj. Edgar A. Mearns, surgeon, U. S. Army. By Barton W. Evermann. Pp. 505-512, 4 figs. Sept. 24, 1906.

1492. Notes on a newly mounted skeleton of *Merycoidodon*, a fossil mammal. By Charles W. Gilmore. Pp. 513-514, 1 pl. Oct. 8, 1906.

1493. Notes on a collection of fishes from Port Arthur, Manchuria, obtained by James Francis Abbott. By David Starr Jordan and Edwin Chapin Starks. Pp. 515-526, 5 figs. Oct. 8, 1906.

1494. Notes on the slow lemurs. By Marcus Ward Lyon, Jr. Pp. 527-538, 1 pl. Nov. 9, 1906.

1495. Anatomical observations on a collection of orang skulls from western Borneo; with a bibliography. By Aleš Hrdlička. Pp. 539-568, 8 figs. Nov. 17, 1906.

1496. Description of a new species of great ant-eater from Central America. By Marcus Ward Lyon, Jr. Pp. 569-571, 1 pl. Nov. 14, 1906.

1497. Note on an occurrence of graphitic iron in a meteorite. By Wirt Tassin. Pp. 573-574, 1 fig. Nov. 14, 1906.

1498. Mammals of Banka, Mendanau, and Billiton Islands, between Sumatra and Borneo. By Marcus Ward Lyon, Jr. Pp. 575-612, 1 fig. Dec. 18, 1906.

1499. A review of the herring-like fishes of Japan. By David Starr Jordan and Albert Christian Herre. Pp. 613-645, 5 figs. Dec. 18, 1906.

1500. Mammal remains from two prehistoric village sites in New Mexico and Arizona. By Marcus Ward Lyon, Jr. Pp. 647-649. Dec. 18, 1906.

1501. Description of a new rock-fish of the genus *Sebastodes* from California. By Barton Warren Evermann and Edmund Lee Goldsborough. Pp. 651-652, 1 fig. Jan. 9, 1907.

Proc. No.

1502. Mammals of Batam Island, Rhio Archipelago. By Marcus Ward Lyon, Jr. Pp. 653-657. Jan. 16, 1907.

1503. An account of Amazon River fishes collected by J. B. Steere; with a note on *Pimelodus clarias*. By Carl H. Eigenmann and Barton A. Bean. Pp. 659-668, 5 figs. Jan. 16, 1907.

1504. North American parasitic copepods belonging to the family Caligidae. Part 2.—The Trebinae and Euryphorinae. By Charles Branch Wilson. Pp. 669-720, 19 figs., 6 pls. Jan. 17, 1907.

Volume 32

Proceedings of the United States National Museum, vol. 32. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); pp. 1-744 (Proceedings papers 1505-1555; pp. 745-767 (index); 190 figs., 82 pls. 1907.

1505. A specimen of typical Burchell's zebra in the United States National Museum. By Marcus Ward Lyon, Jr. Pp. 1-3, 3 pls. Jan. 16, 1907.

1506. Revision of the American moths of the genus *Argyresthia*. By August Busck. Pp. 5-24, 3 figs., 2 pls. Jan. 16, 1907.

1507. The fresh-water Amphipoda of North America. By Ada L. Weckel. Pp. 25-58, 15 figs. Feb. 4, 1907.

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1509. New marine worms of the genus *Myzostoma*. By J. F. McClendon. Pp. 63-65, 2 figs. Feb. 7, 1907.

1510. Notes on fishes from the Island of Santa Catalina, southern California. By David Starr Jordan and Edwin Chapin Starks. Pp. 67-77, 8 figs. Feb. 7, 1907.

1511. Notes on the composition and structure of the Hendersonville, North Carolina, meteorite. By George P. Merrill. Pp. 79-82, 1 fig., 2 pls. Feb. 6, 1907.

1512. The Philippine mollusks of the genus *Planorbis*. By Paul Bartsch. Pp. 83-85, 2 figs. Feb. 7, 1907.

1513. A review of the Mullidae, surmullets, or goatfishes of the shores of Japan. By John Otterbein Snyder. Pp. 87-102, 3 figs. Feb. 7, 1907.

1514. A review of the bats of the genus *Hemiderma*. By Walter L. Hahn. Pp. 103-118. Feb. 8, 1907.

1515. Two new land shells from Mexico. By Paul Bartsch. Pp. 119-120, 2 figs. Feb. 8, 1907.

1516. Report on the mosquitoes of the coast region of California, with descriptions of new species. By Harrison G. Dyar. Pp. 121-129. Feb. 8, 1907.

1517. Note on *Otohime*, a new genus of gurnards. By David Starr Jordan and Edwin Chapin Starks. Pp. 131-133, 1 fig. Feb. 8, 1907.

1518. The Philippine pond snails of the genus *Vivipara*. By Paul Bartsch. Pp. 135-150, 2 pls. Feb. 8, 1907.

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1522. A new mollusk of the genus *Macromphalina* from the west coast of America. By Paul Bartsch. P. 233, 1 fig. Mar. 12, 1907.

1523. A review of the fishes of the family Histiopteridae, found in the waters of Japan; with a note on *Tephritis* Günther. By David Starr Jordan. Pp. 235-239. Mar. 12, 1907.

1524. On the meteorite from Rich Mountain, Jackson County, North Carolina. By George P. Merrill, with chemical analysis by Wirt Tassin. Pp. 241-244, 1 pl. Apr. 18, 1907.

Proc. No.

1525. A review of the fishes of the family Gerridae found in the waters of Japan. By David Starr Jordan. Pp. 245-248, 2 figs. Apr. 8, 1907.

1526. Some madreporarian corals from French Somaliland, East Africa, collected by Dr. Charles Gravier. By T. Wayland Vaughan. Pp. 249-266, 12 pls. Apr. 18, 1907.

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1530. The Decticinae (a group of Orthoptera) of North America. By Andrew Nelson Caudell. Pp. 285-410, 94 figs. May 23, 1907.

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1533. A review of the cobitoid fishes of the basin of the Amur. By Leo Berg. Pp. 435-438. May 23, 1907.

1534. Remarks on the giant squirrels of Sumatra, with descriptions of two new species. By Marcus Ward Lyon, Jr. Pp. 439-445, 1 pl. May 23, 1907.

1535. A new terrestrial isopod from Guatemala, the type of a new genus. By Harriet Richardson. Pp. 447-450, 1 fig. May 23, 1907.

1536. A review of the species of the ten-spined sticklebacks or *Pygosteus* from East Asia. By Leo Berg. Pp. 451-454. May 23, 1907.

1537. Notes on mammals of the Kankakee Valley. By Walter L. Hahn. Pp. 455-464. June 15, 1907.

1538. A new salamander from Nicaragua. By Leonhard Stejneger. Pp. 465-466. June 15, 1907.

1539. Eighteen new species and one new genus of birds from eastern Asia and the Aleutian Islands. By Austin H. Clark. Pp. 467-475. June 15, 1907.

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1541. List of fishes recorded from Okinawa or the Riu Kiu Islands of Japan. By David Starr Jordan and Edwin Chapin Starks. Pp. 491-504, 5 figs. June 15, 1907.

1542. A new gerrhonotine lizard from Costa Rica. By Leonhard Stejneger. Pp. 505-506. June 15, 1907.

1543. Two new crinoids from the North Pacific Ocean. By Austin H. Clark. Pp. 507-512, 2 figs. June 15, 1907.

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1550. Descriptions of new species of moths of the family Cochlidiidae. By Harrison G. Dyar. Pp. 565-567. June 15, 1907.

1551. On a collection of crinoids of the genus *Eudiocrinus* from Japan, with description of a new species. By Austin H. Clark. Pp. 569-574. June 15, 1907.

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1552. Notes on the porcupines of the Malay Peninsula and Archipelago. By Marcus Ward Lyon, Jr. Pp. 575-594, 4 pls. June 29, 1907.

1553. A catalogue of the Acarina, or mites, of the United States. By Nathan Banks. Pp. 595-625. June 29, 1907.

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1555. The holothurians of the Hawaiian Islands. By Walter K. Fisher. Pp. 637-744, 17 pls. June 29, 1907.

Volume 33

Proceedings of the United States National Museum, vol. 33. Pp. i-xv (title page, advertisement, table of contents. and list of illustrations); pp. 1-729 (Proceedings papers 1556-1590); pp. 731-750 (index); 144 figs., 65 pls. 1908.

1556. An annotated list of characin fishes in the United States National Museum and the Museum of Indiana University, with descriptions of new species. By Carl H. Eigenmann and Fletcher Ogle. Pp. 1-36, 8 figs. Sept. 10, 1907.

1557. Descriptions of new species of Upper Paleozoic fossils from China. By George H. Girty. Pp. 37-48. Sept. 10, 1907.

1558. The holothurians of the North Pacific coast of North America collected by the *Albatross* in 1903. By Charles Lincoln Edwards. Pp. 49-68, 12 figs. Sept. 14, 1907.

1559. Descriptions of new species of recent unstalked crinoids from the North Pacific Ocean. By Austin Hobart Clark. Pp. 69-84. Sept. 17, 1907.

1560. Notes on parasites of Bermuda fishes. By Edwin Linton. Pp. 85-126, 15 pls. Oct. 14, 1907.

1561. Descriptions of new species of Recent unstalked crinoids from the coasts of northeastern Asia. By Austin Hobart Clark. Pp. 127-156. Sept. 17, 1907.

1562. A review of the cirrhitoid fishes of Japan. By David Starr Jordan and Albert Christian Herre. Pp. 157-167, 2 figs. Oct. 23, 1907.

1563. On some earwigs (Forficulidae) collected in Guatemala by Messrs. Schwarz and Barber. By Andrew Nelson Caudell. Pp. 169-176. Oct. 23, 1907.

1564. New marine mollusks from the west coast of America. By Paul Bartsch. Pp. 177-183. Oct. 23, 1907.

1565. Supplementary notes on Martyn's Universal Conchologist. By William Healey Dall. Pp. 185-192, 1 fig. Oct. 23, 1907.

1566. Basketry bolo case from Basilan Island. By Otis T. Mason. Pp. 193-196, 5 figs. Oct. 25, 1907.

1567. Descriptions of new North American tineid moths, with a generic table of the family Blastobasidae. By Lord Walsingham. Pp. 197-228. Oct. 29, 1907.

1568. On a collection of fishes from the Philippine Islands, made by Maj. Edgar A. Mearns, surgeon, U. S. Army, with descriptions of seven new species. By Alvin Seale and Barton A. Bean. Pp. 229-248, 8 figs. Nov. 21, 1907.

1569. The West American mollusks of the genus *Triphoris*. By Paul Bartsch. Pp. 249-262, 1 pl. Dec. 12, 1907.

1570. On a collection of fishes from Echigo, Japan. By David Starr Jordan and Robert Earl Richardson. Pp. 263-266, 3 figs. Dec. 12, 1907.

1571. The dragonflies (Odonata) of Burma and Lower Siam.—II. Subfamilies Cordulegasterinae, Chlorogomphinae, and Gomphinae. By Edward Bruce Williamson. Pp. 267-317, 39 figs. Dec. 13, 1907.

1572. Description of a new species of killifish, *Lucania browni*, from a hot spring in Lower California. By David Starr Jordan and Robert Earl Richardson. Pp. 319-321, 1 fig. Dec. 24, 1907.

1573. North American parasitic copepods belonging to the family Caligidae. Parts 3 and 4.—A revision of the Pandarinae and the Cecropinae. By Charles Branch Wilson. Pp. 223-490, 18 figs., 27 pls. Dec. 31, 1907.

1574. The pyramidellid mollusks of the Oregonian faunal area. By William Healey Dall and Paul Bartsch. Pp. 491-534, 5 pls. Dec. 31, 1907.

Proc. No.

1575. List of fishes collected in the river at Buytenzorg, Java, by Dr. Douglas Houghton Campbell. By David Starr Jordan and Alvin Seale. Pp. 535-543, 2 figs. Dec. 24, 1907.

1576. A new geckoid lizard from the Philippine Islands. By Leonhard Stejneger. Pp. 545-546. Dec. 24, 1907.

1577. Mammals collected in western Borneo by Dr. W. L. Abbott. By Marcus Ward Lyon, Jr. Pp. 547-571, 2 figs. Dec. 24, 1907.

1578. Two new species of toads from the Philippines. By Leonhard Stejneger. Pp. 573-576. Feb. 18, 1908.

1579. The pulque of Mexico. By Walter Hough. Pp. 577-592, 19 figs. Feb. 18, 1908.

1580. North American parasitic copepods: New genera and species of Caliginae. By Charles Branch Wilson. Pp. 593-627, 8 pls. Feb. 28, 1908.

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1585. The crinoid genus *Comatula* Lamarck; with a note on the *Encrinus parrae* of Guerin. By Austin Hobart Clark. Pp. 683-688. Feb. 29, 1908.

1586. On some isopods of the family Dajidae from the northwest Pacific Ocean, with descriptions of a new genus and two new species. By Harriet Richardson. Pp. 689-696, 7 figs. Feb. 29, 1908.

1587. Notes on the fresh-water mollusk *Planorbis magnificus* and descriptions of two new forms of the same genus from the southern States. By Paul Bartsch. Pp. 697-700, 1 pl. Mar. 4, 1908.

1588. On *Ctenolucius* Gill, a neglected genus of characin fishes, with notes on the typical species. By Barton A. Bean. Pp. 701-703, 1 fig. Mar. 4, 1908.

1589. Fresh-water Crustacea from Labrador and Newfoundland. By Joseph A. Cushman. Pp. 705-713, 5 pls. Mar. 4, 1908.

1590. On the collection of thysanopterous insects from Barbados and St. Vincent Islands. By Henry James Franklin. Pp. 715-729, 3 pls. Mar. 4, 1908.

Volume 34

Proceedings of the United States National Museum, vol. 34. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); pp. 1-746 (Proceedings papers 1591-1630); pp. 747-777 (index); 78 figs., 105 pls. 1908.

1591. Schizopod crustaceans in the U. S. National Museum: Schizopods from Alaska. By Arnold E. Ortmann. Pp. 1-10, 1 pl. Apr. 6, 1908.

1592. Notes on a collection of fishes from the Gulf of Mexico at Vera Cruz and Tampico. By David Starr Jordan and Mary Cynthia Dickerson. Pp. 11-22, 2 figs. Apr. 6, 1908.

1593. The parasitic isopod *Leidya distorta* (Leidy) found on a new host. By Harriet Richardson. Pp. 23-26, 5 figs. Apr. 6, 1908.

1594. Descriptions of four new species of amphipodous Crustacea from the Gulf of Mexico. By Arthur S. Pearse. Pp. 27-32, 4 figs. Apr. 6, 1908.

1595. Description of *Pantosteus santa-anae,* a new species of fish from the Santa Ana River, California. By John Otterbein Snyder. Pp. 33-34. Apr. 6, 1908.

1596. The Dalmanellas of the Chemung formation, and a closely related new brachiopod genus *Thiemella.* By Henry S. Williams. Pp. 35-64, 3 pls. Apr. 6, 1908.

1597. Descriptions of three new species of saturnian moths. By William Schaus. Pp. 65-66. Apr. 17, 1908.

1598. Description of a new isopod of the genus *Eurycope* from Marthas Vineyard. By Harriet Richardson. Pp. 67-69, 3 figs. Apr. 17, 1908.

Proc. No.

1599. Notes on some western Orthoptera; with the description of one new species. By Andrew Nelson Caudell. Pp. 71-81. Apr. 17, 1908.

1600. On the revision of the mollusk genus *Pterinea* Goldfuss. By Henry Shaler Williams. Pp. 83-90. Apr. 17, 1908.

1601. Descriptions of new species of South American geometrid moths. By William Warren. Pp. 91-110. Apr. 25, 1908.

1602. Description of a new species of half-beak *(Hemiramphus mioprorus)* from Nagasaki, Japan. By David Starr Jordan and Mary C. Dickerson. Pp. 111-112, 1 fig. Apr. 25, 1908.

1603. Foraminifera collected near the Hawaiian Islands by the steamer *Albatross* in 1902. By Rufus Mather Bagg, Jr. Pp. 113-172, 1 pl. Apr. 28, 1908.

1604. Descriptions of new curculionid beetles of the tribe Anthonomini. By W. Dwight Pierce. Pp. 173-181. Apr. 28, 1908.

1605. On three existing species of sea-turtles, one of them *(Caretta remivaga)* new. By Oliver P. Hay. Pp. 183-198, 6 pls. May 4, 1908.

1606. Three new species of lizards from the Philippine Islands. By Leonhard Stejneger. Pp. 199-204, 6 figs. May 4, 1908.

1607. New stalked crinoids from the eastern coast of North America. By Austin Hobart Clark. Pp. 205-208, 3 figs. May 4, 1908.

1608. Descriptions of new species of crinoids, chiefly from the collections made by the U. S. Fisheries steamer *Albatross* at the Hawaiian Islands in 1902; with remarks on the classification of the Comatulida. By Austin Hobart Clark. Pp. 209-239. May 14, 1908.

1609. A new amphipod crustacean, *Orchestoidea biolleyi,* from Costa Rica. By Thomas R. R. Stebbing. Pp. 241-244, 2 figs., 1 pl. May 15, 1908.

1610. Descriptions of new species of mollusks from the Pacific coast of the United States, with notes on other mollusks from the same region. By William Healey Dall. Pp. 245-257. June 16, 1908.

1611. New species of Cretaceous invertebrates from northern Colorado. By Junius Henderson. Pp. 259-264, 1 pl. June 16, 1908.

1612. Some cases of abnormal arm structure in Recent crinoids. By Austin Hobart Clark. Pp. 265-270, 5 figs. June 16, 1908.

1613. The crinoid genus *Eudiocrinus,* with description of a new species. By Austin H. Clark. Pp. 271-279, 11 figs. June 20, 1908.

1614. On some new and old species of Carboniferous fossils. By George H. Girty. Pp. 281-303, 8 pls. July 14, 1908.

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1618. Description of a new isopod genus of the family Dajidae. By Harriet Richardson. Pp. 391-392, 3 figs. Aug. 10, 1908.

1619. Remarks on the horns and on the systematic position of the American antelope. By Marcus Ward Lyon, Jr. Pp. 393-401, 2 pls. Aug. 11, 1908.

1620. Description of a new brittle star from the Upper Miocene of the Santa Cruz Mountains, California. By Ralph Arnold. Pp. 403-405, 1 pl. Aug. 17, 1908.

1621. The late Niagaran strata of west Tennessee. By William F. Pate and Ray S. Bassler. Pp. 407-432. Aug. 18, 1908.

1622. On the occurrence of calcium sulphide (oldhamite) in the Allegan meteorite. By Wirt Tassin. Pp. 433-434. Aug. 19, 1908.

1623. The nomenclature of the Recent crinoids. By Austin Hobart Clark. Pp. 435-542. Aug. 25, 1908.

1624. Descriptions of the Alcyonaria collected by the U. S. Bureau of Fisheries steamer *Albatross* in the vicinity of the Hawaiian Islands in 1902. By Charles C. Nutting. Pp. 543-601, 11 pls. Sept. 12, 1908.

Proc. No.

1625. On a collection of fishes from Fiji, with notes on certain Hawaiian fishes. By David Starr Jordan and Mary Cynthia Dickerson. Pp. 603-617, 6 figs. Sept. 14, 1908.

1626. Mammals collected in eastern Sumatra by Dr. W. L. Abbott during 1903, 1906, and 1907, with descriptions of new species and subspecies. By Marcus Ward Lyon, Jr. Pp. 619-679, 4 figs., 5 pls. Sept. 14, 1908.

1627. Descriptions of two new species of Pleistocene ruminants of the genera *Ovibos* and *Boötherium*, with notes on the latter genus. By James Williams Gidley. Pp. 681-684, 1 fig., 3 pls. Sept. 15, 1908.

1628. On meteoric chromites. By Wirt Tassin. Pp. 685-690. Sept. 15, 1908.

1629. A new rabbit cestode, *Cittotaenia mosaica*. By Maurice C. Hall. Pp. 691-699, 6 figs. Sept. 15, 1908.

1630. The collection of Jewish ceremonial objects in the United States National Museum. By Cyrus Adler and I. M. Casanowicz. Pp. 701-746, 46 pls. Sept. 28, 1908.

Volume 35

Proceedings of the United States National Museum, vol. 35. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); pp. 1-727 (Proceedings papers 1631-1658); pp. 729-757 (index); 251 figs., 91 pls. 1909.

1631. Vocabulary of Malaysian basketwork: A study in the W. L. Abbott collections. By Otis T. Mason. Pp. 1-51, 41 figs., 17 pls. Nov. 7, 1908.

1632. Descriptions of some new mosquitoes from tropical America. By Harrison G. Dyar and Frederick Knab. Pp. 53-70. Oct. 30, 1908.

1633. Some new Isopoda of the superfamily Aselloidea from the Atlantic coast of North America. By Harriet Richardson. Pp. 71-86, 21 figs. Oct. 30, 1908.

1634. The axial canals of the Recent Pentacrinitidae. By Austin Hobart Clark. Pp. 87-91, 16 figs. Oct. 30, 1908.

1635. Descriptions of eighteen new species and two new genera of fishes from Japan and the Riu Kiu Islands. By John Otterbein Snyder. Pp. 93-111. Oct. 30, 1908.

1636. The homologies of the arm joints and arm divisions in the Recent crinoids of the families of the Comatulida and the Pentacrinitidae. By Austin Hobart Clark. Pp. 113-131, 28 figs. Oct. 30, 1908.

1637. The formation of geodes with remarks on the silicification of fossils. By Ray S. Bassler. Pp. 133-154, 1 fig., 7 pls. Nov. 7, 1908.

1638. *Choerodon* in place of *Choerops* for a labroid genus of fishes. By Theodore Gill. Pp. 155-156. Oct. 31, 1908.

1639. Description of new fossil liverwort from the Fort Union beds of Montana. By Frank Hall Knowlton. Pp. 157-159, 1 pl. Nov. 9, 1908.

1640. Descriptions of five species of North American fossil turtles, four of which are new. By Oliver P. Hay. Pp. 161-169, 3 figs., 2 pls. Nov. 9, 1908.

1641. New examples of American Indian skulls with low forehead. By Aleš Hrdlička. Pp. 171-175, 1 fig., 1 pl. Nov. 9, 1908.

1642. Descriptions and figures of some land and fresh-water shells from Mexico, believed to be new. By William Healey Dall. Pp. 177-182, 2 pls. Nov. 10, 1908.

1643. Notes on two rare California fishes, *Rimicola eigenmanni* and *Plagiogrammus hopkinsi*. By John Otterbein Snyder. Pp. 183-186. Oct. 31, 1908.

1644. A generic revision of American moths of the family Oecophoridae, with descriptions of new species. By August Busck. Pp. 187-207. Oct. 31, 1908.

1645. A revision of some species of Noctuidae heretofore referred to the genus *Homoptera* Boisduval. By John B. Smith. Pp. 209-275, 6 pls. Nov. 10, 1908.

1646. New American Paleozoic Ostracoda. Preliminary revision of the Beyrichiidae, with descriptions of new genera. By Edward O. Ulrich and Ray S. Bassler. Pp. 277-340, 64 figs., 8 pls. Nov. 10, 1908.

1647. Descriptions of fossil crabs from California. By Mary J. Rathbun. Pp. 341-349, 5 pls. Nov. 14, 1908.

Proc. No.

1648. On certain genera and species of carnivorous dinosaurs, with special reference to *Ceratosaurus nasicornis* Marsh. By Oliver P. Hay. Pp. 351-366, 4 figs. Oct. 31, 1908.

1649. Descriptions of new species of North American crambid moths. By William Dunham Kearfott. Pp. 367-393, 14 figs. Oct. 31, 1908.

1650. Two new species of Neotropical Orthoptera of the family Acrididae. By James A. G. Rehn. Pp. 395-398, 5 figs. Oct. 30, 1908.

1651. A further report on the Ostracoda of the United States National Museum. By Richard W. Sharpe. Pp. 399-430, 16 pls. Nov. 19, 1908.

1652. North American parasitic copepods: A list of those found upon the fishes of the Pacific coast, with descriptions of new genera and species. By Charles Branch Wilson. Pp. 431-481, 18 pls. Dec. 10, 1908.

1653. Some new isopods of the family Gnathiidae from the Atlantic coast of North America. By Harriet Richardson. Pp. 483-488, 7 figs. Nov. 20, 1908.

1654. The Amphipoda collected by the U. S. Bureau of Fisheries steamer *Albatross* off the west coast of North America, in 1903 and 1904, with descriptions of a new family and several new genera and species. By Samuel J. Holmes. Pp. 489-543, 46 figs. Nov. 20, 1908.

1655. Notes on the mammals and cold-blooded vertebrates of the Indiana University Farm, Mitchell, Indiana. By Walter L. Hahn. Pp. 545-581. Dec. 7, 1908.

1656. Generic names applied to birds during the years 1901 to 1905, inclusive, with further additions to Waterhouse's "Index Generum Avium." By Charles W. Richmond. Pp. 583-655. Dec. 16, 1908.

1657. A revision of the kingfisher genus *Ramphalcyon (Pelargopsis)*. By Harry C. Oberholser. Pp. 657-680. Feb. 9, 1909.

1658. Alcyonaria of the California coast. By Charles C. Nutting. Pp. 681-727, 8 pls. Feb. 20, 1909.

Volume 36

Proceedings of the United States National Museum, vol. 36. Pp. i-xviii (title page, advertisement, table of contents, and list of illustrations); pp. 1-680 (Proceedings papers 1659-1694); pp. 681-697 (index); 205 figs., 70 pls. 1909.

1659. The American species of snapping shrimps of the genus *Synalpheus*. By Henri Coutière. Pp. 1-93, 54 figs. Jan. 30, 1909.

1660. On the skull and the brain of *Triceratops*, with notes on the brain-cases of *Iguanodon* and *Megalosaurus*. By Oliver P. Hay. Pp. 95-108, 3 pls. Feb. 6, 1909.

1661. On Brazilian grasshoppers of the subfamilies Pyrgomorphinae and Locustinae (Acridinae of authors). By James A. G. Rehn. Pp. 109-163, 39 figs. Mar. 3, 1909.

1662. Descriptions of three new species of cisco, or lake herring *(Argyrosomus)*, from the Great Lakes of America; with a note on the species of whitefish. By David Starr Jordan and Barton Warren Evermann. Pp. 165-172, 3 figs. Mar. 3, 1909.

1663. The isopod crustacean, *Ancinus depressus* (Say). By Harriet Richardson. Pp. 173-177, 9 figs. Mar. 3, 1909.

1664. A new American Jurassic crinoid. By Frank Springer. Pp. 179-190, 1 pl. Mar. 3, 1909.

1665. Description of two species of fossil turtles, *Toxochelys stenopora* and *Chrysternon? interpositum*, the latter hitherto unknown. By Oliver P. Hay. Pp. 191-196, 3 figs., 1 pl. Apr. 8, 1909.

1666. Osteology of the Jurassic reptile *Camptosaurus*, with a revision of the species of the genus, and descriptions of two new species. By Charles W. Gilmore. Pp. 197-332, 48 figs., 15 pls. Apr. 17, 1909.

1667. The collection of rosaries in the United States National Museum. By Immanuel M. Casanowicz. Pp. 333-359, 10 pls. Apr. 17, 1909.

1668. *Comatilla*, a remarkable new genus of unstalked crinoids. By Austin Hobart Clark. Pp. 361-367. Apr. 27, 1909.

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Proc. No.

1669. Description of a new species of leatherback turtle from the Miocene of Maryland. By William Palmer. Pp. 369-373, 1 pl. Apr. 27, 1909.

1670. Four new species of isopods from the coast of California. By S. J. Holmes and M. E. Gay. Pp. 375-379, 6 figs. Apr. 27, 1909.

1671. Notes on two slugs of the genus *Veronicella.* By W. W. Robbins and T. D. A. Cockerell. Pp. 381-384, 1 pl. Apr. 27, 1909.

1672. Anyam gila (mad weave): A Malaysian type of basketwork. By Otis T. Mason. Pp. 385-390, 11 figs. May 6, 1909.

1673. On a collection of Recent crinoids from the Philippine Islands. By Austin Hobart Clark. Pp. 391-410, 1 fig. May 13, 1909.

1674. Descriptions of some bees in the U. S. National Museum. By T. D. A. Cockerell. Pp. 411-420. May 13, 1909.

1675. Description of a new isopod of the genus *Jaeropsis* from Patagonia. By Harriet Richardson. Pp. 421-422, 1 fig. May 13, 1909.

1676. *Ammodiscoides,* a new genus of arenaceous Foraminifera. By Joseph A. Cushman. Pp. 423-424, 1 pl. May 13, 1909.

1677. Description of a new whitefish *(Coregonus oregonius)* from McKenzie River, Oregon. By David Starr Jordan and John Otterbein Snyder. Pp. 425-430, 1 fig. May 15, 1909.

1678. The isopod crustacean *Acanthoniscus spiniger* Kinahan redescribed. By Harriet Richardson. Pp. 431-434, 7 figs. May 15, 1909.

1679. Additions to the list of Philippine birds, with descriptions of new and rare species. By Edgar Alexander Mearns. Pp. 435-447. May 22, 1909.

1680. Remarks on the insectivores of the genus *Gymnura.* By Marcus Ward Lyon, Jr. Pp. 449-456, 4 pls. May 27, 1909.

1681. Description of a new snake from Panama. By Leonhard Stejneger. Pp. 457-458. May 27, 1909.

1682. Description of a new skate *(Dactylobatus armatus)* from deep water off the southern Atlantic coast of the United States. By Barton A. Bean and Alfred C. Weed. Pp. 459-461, 1 fig., 1 pl. May 27, 1909.

1683. A list of birds collected by Dr. Paul Bartsch in the Philippine Islands, Borneo, Guam, and Midway Island, with descriptions of three new forms. By Edgar Alexander Mearns. Pp. 463-478. May 27, 1909.

1684. Additional notes on mammals of the Rhio-Linga Archipelago, with descriptions of new species and a revised list. By Marcus Ward Lyon, Jr. Pp. 479-491, 1 pl. June 1, 1909.

1685. Revision of the crinoid family Comasteridae, with descriptions of new genera and species. By Austin Hobart Clark. Pp. 493-507. June 7, 1909.

1686. A new squirrel from Direction Island, South China Sea. By Marcus Ward Lyon, Jr. Pp. 509-510. June 7, 1909.

1687. The thorax of insects and the articulation of the wings. By Robert Evans Snodgrass. Pp. 511-595, 6 figs., 30 pls. June 18, 1909.

1688. Descriptions of new genera and species of fishes from Japan and the Riu Kiu Islands. By John Otterbein Snyder. Pp. 597-610. June 18, 1909.

1689. Notes on the fossil mammalian genus *Ptilodus,* with descriptions of new species. By James Williams Gidley. Pp. 611-626, 9 figs., 1 pl. June 19, 1909.

1690. Fresh-water sponges in the collection of the United States National Museum. —Part I. Specimens from the Philippines and Australia. By Nelson Annandale. Pp. 627-632, 4 figs. June 19, 1909.

1691. Descriptions of seventeen new species of Recent crinoids. By Austin Hobart Clark. Pp. 633-651. June 19, 1909.

1692. Dragonflies of the Mississippi Valley collected during the pearl mussel investigations on the Mississippi River, July and August, 1907. By Charles Branch Wilson. Pp. 653-671. June 19, 1909.

1693. Four new species of the crinoid genus *Rhizocrinus.* By Austin Hobart Clark. Pp. 673-676. June 19, 1909.

1694. Descriptions of two new species of electric rays, of the family Narcobatidae, from deep water off the southern Atlantic coast of the United States. By Barton A. Bean and Alfred C. Weed. Pp. 677-680, 1 fig. June 21, 1909.

Volume 37

Proceedings of the United States National Museum, vol. 37. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); pp. 1-666 (Proceedings papers 1695-1724); pp. 667-697 (index); 108 figs., 39 pls. 1910.

Proc. No.

1695. The mouse deer of the Rhio-Linga Archipelago: A study of specific differentiation under uniform environment. By Gerrit S. Miller, Jr. Pp. 1-9, 2 figs., 3 pls. Sept. 1, 1909.

1696. Carboniferous air-breathing vertebrates of the United States National Museum. By Roy L. Moodie. Pp. 11-28, 7 pls. Sept. 23, 1909.

1697. Five new species of Recent unstalked crinoids. By Austin Hobart Clark. Pp. 29-34. Aug. 23, 1909.

1698. A new rhynchocephalian reptile from the Jurassic of Wyoming, with notes on the fauna of "Quarry 9." By Charles W. Gilmore. Pp. 35-42, 3 figs., 1 pl. Oct. 15, 1909.

1699. On the nature of *Edestus* and related genera, with descriptions of one new genus and three new species. By Oliver P. Hay. Pp. 43-61, 7 figs., 4 pls. Oct. 16, 1909.

1700. Report on barnacles of Peru, collected by Dr. R. E. Coker and others. By Henry A. Pilsbry. Pp. 63-74, 2 figs., 4 pls. Oct. 18, 1909.

1701. Isopods collected in the Northwest Pacific by the U. S. Bureau of Fisheries steamer *Albatross* in 1906. By Harriet Richardson. Pp. 75-129, 50 figs. Oct. 22, 1909.

1702. Fresh-water sponges collected in the Philippines by the *Albatross* Expedition. By Nelson Annandale. Pp. 131-132. Oct. 23, 1909.

1703. The polychaetous annelids dredged in 1908 by Mr. Owen Bryant off the coasts of Labrador, Newfoundland, and Nova Scotia. By J. Percy Moore. Pp. 133-146. Oct. 25, 1909.

1704. Report on a collection of shells from Peru, with a summary of the littoral marine Mollusca of the Peruvian zoological province. By William Healey Dall. Pp. 147-294, 9 pls. Nov. 24, 1909.

1705. Four new land shells from the Philippine Islands. By Paul Bartsch. Pp. 295-299, 1 pl. Nov. 26, 1909.

1706. Coelenterates from Labrador and Newfoundland, collected by Mr. Owen Bryant from July to October, 1908. By Henry B. Bigelow. Pp. 301-320, 3 pls. Dec. 14, 1909.

1707. Three new land shells from Mexico and Guatemala. By Paul Bartsch. Pp. 321-323, 1 pl. Dec. 14, 1909.

1708. Studies of North American weevils. By W. Dwight Pierce. Pp. 325-364. Dec. 11, 1909.

1709. Notes on the Philippine pond snails of the genus *Vivipara*, with descriptions of new species. By Paul Bartsch. Pp. 365-367, 1 pl. Dec. 14, 1909.

1710. The North American dragonflies (Odonata) of the genus *Macromia*. By Edward Bruce Williamson. Pp. 369-398, 7 figs., 2 pls. Dec. 4, 1909.

1711. A new species of *Cerithiopsis* from Alaska. By Paul Bartsch. Pp. 399-400, 1 fig. Dec. 11, 1909.

1712. Fresh-water sponges in the collection of the United States National Museum.—Part II. Specimens from North and South America. By Nelson Annandale. Pp. 401-406, 3 figs. Dec. 22, 1909.

1713. Diagnoses of new cephalopods from the Hawaiian Islands. By S. Stillman Berry. Pp. 407-419, 9 figs. Dec. 30, 1909.

1714. A review of the Serranidae or sea bass of Japan. By David Starr Jordan and Robert Earl Richardson. Pp. 421-474, 16 figs. Jan. 9, 1910.

1715. On olivine-diabase from Davidson County, North Carolina. By Joseph E. Pogue. Pp. 475-484, 1 fig., 1 pl. Jan. 19, 1910.

1716. The snapping shrimps (Alpheidae) of the Dry Tortugas, Florida. By Henri Coutière. Pp. 485-487, 3 figs. Jan. 20, 1910.

Proc. No.

1717. Some bees of the genus *Augochlora* from the West Indies. By T. D. A. Cockerell. Pp. 489-494. Feb. 2, 1910.

1718. Description of a new terrestrial isopod from Guatemala. By Harriet Richardson. Pp. 495-497, 1 fig. Feb. 2, 1910.

1719. The type-species of the North American genera of Diptera. By D. W. Coquillett. Pp. 499-647. Aug. 4, 1910.

1720. Description of a new isopod of the genus *Notasellus* from the east coast of Patagonia. By Harriet Richardson. Pp. 649-650, 1 fig. Aug. 4, 1910.

1721. The paradise flycatchers of Japan and Korea. By Pierre Louis Jouy. Pp. 651-655. Aug. 4, 1910.

1722. Some new hymenopterous insects from the Philippine Islands. By S. A. Rohwer. Pp. 657-660. Aug. 4, 1910.

1723. Notes on *Anteliochimaera* and related genera of chimaeroid fishes. By Barton A. Bean and Alfred C. Weed. Pp. 661-663, 2 pls. Aug. 4, 1910.

1724. A new ophiuran from the West Indies. By Hubert Lyman Clark. Pp. 665-666, 2 figs. Aug. 4, 1910.

Volume 38

Proceedings of the United States National Museum, vol. 38. Pp. i-xv (title page, advertisement, table of contents, and list of illustrations); pp. 1-650 (Proceedings papers 1725-1771); pp. 651-677 (index); 146 figs., 56 pls. 1911.

1725. The Gustavus Vasa Fox collection of Russian souvenirs in the United States National Museum. By Immanuel M. Casanowicz. Pp. 1-15, 8 pls. Apr. 3, 1910.

1726. On sand-barites from Kharga, Egypt. By Joseph E. Pogue. Pp. 17-24, 1 fig., 1 pl. Apr. 30, 1910.

1727. The birds collected and observed during the cruise of the United States Fisheries steamer *Albatross* in the North Pacific Ocean, and in the Bering, Okhotsk, Japan, and eastern seas, from April to December, 1906. By Austin Hobart Clark. Pp. 25-74, 1 fig. Apr. 30, 1910.

1728. Description of a new species of deep-water sculpin *(Triglopsis ontariensis)* from Lake Ontario, with notes on related species. By David Starr Jordan and William Francis Thompson. Pp. 75-78, 3 figs. Apr. 30, 1910.

1729. Report on isopods from Peru, collected by Dr. R. E. Coker. By Harriet Richardson. Pp. 79-85, 6 figs. May 3, 1910.

1730. Three new genera and species of parasitic Hymenoptera. By J. C. Crawford. Pp. 87-90, 5 figs. May 3, 1910.

1731. The batrachians and reptiles of Formosa. By Leonhard Stejneger. Pp. 91-114. May 3, 1910.

1732. The phylogenetic interrelationships of the Recent crinoids. By Austin H. Clark. Pp. 115-118. May 3, 1910.

1733. New Hymenoptera from the Philippine Islands. By J. C. Crawford. Pp. 119-133. May 3, 1910.

1734. Notes on a collection of fishes from Cameron, Louisiana. By Frank Walter Weymouth. Pp. 135-145, 2 figs. May 3, 1910.

1735. Report on a collection of birds made by Pierre Louis Jouy in Korea. By Austin H. Clark. Pp. 147-176. May 9, 1910.

1736. On some land shells collected by Dr. Hiram Bingham in Peru. By William Healey Dall. Pp. 177-182, 4 figs. June 6, 1910.

1737. Fresh-water sponges in the collection of the United States National Museum.—Part III. Description of a new species of *Spongilla* from China. By Nelson Annandale. P. 183. June 6, 1910.

1738. A revision of the fossil plants of the genus *Nageiopsis* of Fontaine. By Edward W. Berry. Pp. 185-195, 2 figs. June 6, 1910.

1739. On a collection of Tenthredinoidea from eastern Canada. By S. A. Rohwer. Pp. 197-209. June 6, 1910.

1740. On the origin of certain types of crinoid stems. By Austin Hobart Clark. Pp. 211-216. June 6, 1910.

Proc. No.

1741. Summary of the shells of the genus *Conus* from the Pacific coast of America in the U. S. National Museum. By William Healey Dall. Pp. 217-228. June 6, 1910.

1742. Descriptions of some new species and genera of Lepidoptera from Mexico. By Harrison G. Dyar. Pp. 229-273. June 7, 1910.

1743. A new Australian crinoid. By Austin H. Clark. Pp. 275-276. June 7, 1910.

1744. A review of the flounders belonging to the genus *Pleuronichthys*. By Edwin Chapin Starks and William Francis Thompson. Pp. 277-287, 2 figs. June 14, 1910.

1745. The North American bees of the genus *Nomia*. By T. D. A. Cockerell. Pp. 289-298. June 14, 1910.

1746. A new fresh-water amphipod from Virginia, with some notes on its biology. By George C. Embody. Pp. 299-305, 17 figs. June 18, 1910.

1747. Descriptions of eight new species of fossil turtles from west of the one hundredth meridian. By Oliver P. Hay. Pp. 307-326, 23 figs., 3 pls. June 29, 1910.

1748. A comparison of the chub-mackerels of the Atlantic and Pacific Oceans. By Barton Warren Evermann and William Converse Kendall. Pp. 327-328. June 18, 1910.

1749. A new European crinoid. By Austin Hobart Clark. Pp. 329-333. June 18, 1910.

1750. On some Ostracoda, mostly new, in the collection of the United States National Museum. By Richard W. Sharpe. Pp. 335-341, 5 figs. August 6, 1910.

1751. Descriptions of some new species of monkeys of the genera *Pithecus* and *Pygathrix* collected by Dr. W. L. Abbott and presented to the United States National Museum. By D. G. Elliot. Pp. 343-352. August 6, 1910.

1752. Note on the gold-eye, *Amphiodon alosoides* Rafinesque, or *Elattonistius chrysopsis* (Richardson). By David Starr Jordan and William Francis Thompson. Pp. 353-357, 2 figs. Aug. 6, 1910.

1753. Studies on the North American geometrid moths of the genus *Pero*. By John A. Grossbeck. Pp. 359-377, 4 pls. Aug. 19, 1910.

1754. Descriptions of new species of ichneumon flies. By H. L. Viereck. Pp. 379-384, 3 figs. Aug. 6, 1910.

1755. A new carnivore from China. By Gerrit S. Miller, Jr. Pp. 385-386, 1 pl. Aug. 19, 1910.

1756. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 5.] *Proisocrinus*, a new genus of Recent crinoids. By Austin Hobart Clark. Pp. 387-390, 3 figs. Aug. 6, 1910.

1757. Descriptions of two new genera and sixteen new species of mammals from the Philippine Islands. By Gerrit S. Miller, Jr. Pp. 391-404, 3 pls. Aug. 19, 1910.

1758. Notes on the marine Copepoda and Cladocera of Woods Hole and adjacent regions, including a synopsis of the genera of the Harpacticoida. By Richard W. Sharpe. Pp. 405-436, 20 figs. Aug. 20, 1910.

1759. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 6.] New arenaceous Foraminifera from the Philippines. By Joseph Augustine Cushman. Pp. 437-442, 19 figs. Aug. 20, 1910.

1760. The Dermaptera (earwigs) of the United States National Museum. By Malcolm Burr. Pp. 443-467, 8 figs. Aug. 20, 1910.

1761. On a new Labradorean species of *Onchidiopsis*, a genus of mollusks new to eastern North America; with remarks on its relationships. By Francis N. Balch. Pp. 469-484, 2 pls. Oct. 6, 1910.

1762. *Leidyosuchus sternbergii*, a new species of crocodile from the *Ceratops* beds of Wyoming. By Charles W. Gilmore. Pp. 485-502, 2 figs., 7 pls. Oct. 15, 1910.

1763. Report on the fishes collected by Mr. Owen Bryant on a trip to Labrador in the summer of 1908. By William Converse Kendall. Pp. 503-510, 1 pl. Oct. 15, 1910.

Proc. No.

1764. A review of the venomous toadfishes. By Barton A. Bean and Alfred C. Weed. Pp. 511-526, 7 figs., 4 pls. Oct. 15, 1910.

1765. New moths of the genus *Trichostibas*. By August Busck. Pp. 527-530, 1 pl. Oct. 15, 1910.

1766. The stalk-eyed Crustacea of Peru and the adjacent coast. By Mary J. Rathbun. Pp. 351-620, 3 figs., 21 pls. Oct. 20, 1910.

1767. Marine amphipods from Peru. By Alfred O. Walker. Pp. 621-622, 1 fig. Oct. 18, 1910.

1768. Fresh-water amphipods from Peru. By Ada L. Weckel. Pp. 623-624, 1 fig. Oct. 18, 1910.

1769. A revision of the fossil plants of the genera *Acrostichopteris, Taeniopteris, Nilsonia,* and *Sapindopsis* from the Potomac group. By Edward W. Berry. Pp. 625-644. Oct. 18, 1910.

1770. Description of a new parasitic isopod from the Hawaiian Islands. By Harriet Richardson. Pp. 645-647, 6 figs. Oct. 18, 1910.

1771. Fresh-water sponges in the collection of the United States National Museum.—Part IV. Note on the fresh-water sponge, *Ephydatia japonica,* and its allies. By Nelson Annandale. Pp. 649-650. Oct. 18, 1910.

Volume 39

Proceedings of the United States National Museum, vol. 39. Pp. i-xviii (title page, advertisement, table of contents, and list of illustrations); pp. 1-664 (Proceedings papers 1772-1807); pp. 665-968 (index); 189 figs., 71 pls. 1911.

1772. The annelids of the family Arenicolidae of North and South America, including an account of *Arenicola glacialis* Murdoch. By James Hartley Ashworth. Pp. 1-32, 14 figs. Sept. 23, 1910.

1773. A new genus and species of lizard from Florida. By Leonhard Stejneger. Pp. 33-35, 6 figs. Sept. 23, 1910.

1774. The thorax of the Hymenoptera. By Robert Evans Snodgrass. Pp. 37-91, 91 figs., 16 pls. Oct. 25, 1910.

1775. Terrestrial isopods collected in Costa Rica by J. F. Tristan, with descriptions of a new genus and species. By Harriet Richardson. Pp. 93-95, 4 figs. Oct. 25, 1910.

1776. A new scincid lizard from the Philippine Islands. By Leonhard Stejneger. Pp. 97-98. Oct. 25, 1910.

1777. Japanese sawflies in the collection of the United States National Museum. By S. A. Rohwer. Pp. 99-120. Oct. 25, 1910.

1778. The fishes of the Lake of the Woods and connecting waters. By Barton Warren Evermann and Homer Barker Latimer. Pp. 121-136. Oct. 25, 1910.

1779. Description of a new species of *Anilocra* from the Atlantic coast of North America. By Harriet Richardson. Pp. 137-138, 1 fig. Oct. 25, 1910.

1780. A new species of cestode parasite (*Taenia balaniceps*) of the dog and the lynx, with a note on *Proteocephalus punicus*. By Maurice C. Hall. Pp. 139-151, 9 figs. Oct. 25, 1910.

1781. The west American mollusks of the genus *Alaba*. By Paul Bartsch. Pp. 153-156, 4 figs. Oct. 25, 1910.

1782. Notes on the structure and habits of the wolffishes. By Theodore Gill. Pp. 157-187, 13 figs., 12 pls. Jan. 9, 1911.

1783. North American parasitic copepods.—Part 9. The Lernaeopodidae. By Charles Branch Wilson. Pp. 189-226, 8 pls. Jan. 9, 1911.

1784. Description of a new rabbit from islands off the coast of Virginia. By Edgar A. Mearns. Pp. 227-228, 2 pls. Jan. 9, 1911.

1785. Descriptions of new mollusks of the family Vitrinellidae from the west coast of America. By Paul Bartsch. Pp. 229-234, 2 pls. Jan. 9, 1911.

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1787. A review of the sciaenoid fishes of Japan. By David Starr Jordan and William Francis Thompson. Pp. 241-261, 4 figs. Jan. 30, 1911.

Proc. No.

1788. North American parasitic copepods belonging to the family Ergasilidae. By Charles Branch Wilson. Pp. 263-400, 41 figs., 20 pls. Jan. 11, 1911.

1789. New species of reared ichneumon-flies. By H. L. Viereck. Pp. 401-408. Jan. 11, 1911.

1790. The Recent and fossil mollusks of the genus *Alabina* from the west coast of America. By Paul Bartsch. Pp. 409-418, 2 pls. Jan. 13, 1911.

1791. Sperm transfer in certain decapods. By E. A. Andrews. Pp. 419-434, 15 figs. Jan. 11, 1911.

1792. A review of the fishes of the families Lobotidae and Lutianidae, found in the waters of Japan. By David Starr Jordan and William Francis Thompson. Pp. 435-471, 8 figs. Jan. 30, 1911.

1793. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 7.] *Thalassocrinus*, a new genus of stalked crinoids from the East Indies. By Austin Hobart Clark. Pp. 473-476. Jan. 11, 1911.

1794. On some hymenopterous insects from the island of Formosa. By S. A. Rohwer. Pp. 477-485. Jan. 11, 1911.

1795. On the inorganic constituents of the skeletons of two Recent crinoids. By Austin Hobart Clark. Pp. 487-488. Jan. 11, 1911.

1796. A new labyrinthodont from the Kansas Coal Measures. By Roy L. Moodie. Pp. 489-495, 4 figs. Jan. 30, 1911.

1797. *Corynotrypa*, a new genus of tubuliporoid Bryozoa. By Ray S. Bassler. Pp. 497-527, 27 figs. Jan. 30, 1911.

1798. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 8.] On a collection of unstalked crinoids made by the United States Fisheries steamer *Albatross* in the vicinity of the Philippine Islands. By Austin Hobart Clark. Pp. 529-563. Feb. 15, 1911.

1799. The west American mollusks of the genus *Eumeta*. By Paul Bartsch. Pp. 565-568, 3 figs. Feb. 15, 1911.

1800. Description of a little-known rattlesnake, *Crotalus willardi*, from Arizona. By Frank A. Hartman. Pp. 569-570, 4 figs. Feb. 15, 1911.

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1802. The Recent and fossil mollusks of the genus *Diastoma* from the west coast of America. By Paul Bartsch. Pp. 581-584, 4 figs. Feb. 15, 1911.

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1804. Descriptions of new Hymenoptera. 1. By J. C. Crawford. Pp. 617-623, 3 figs. Feb. 25, 1911.

1805. North American parasitic copepods. Descriptions of new genera and species. By Charles Branch Wilson. Pp. 625-634, 4 pls. March 11, 1911.

1806. Bees in the collection of the U. S. National Museum. 1. By T. D. A. Cockerell. Pp. 635-658, 1 fig. Mar. 3, 1911.

1807. *Hyalinothrix*, a new genus of starfishes from the Hawaiian Islands. By Walter K. Fisher. Pp. 659-664, 3 pls. Mar. 11, 1911.

Volume 40

Proceedings of the United States National Museum, vol. 40. Pp. i-xi (title page, advertisement, table of contents, and list of illustrations); pp. 1-654 (Proceedings papers 1808-1845); pp. 655-670 (index); 40 figs., 70 pls. 1911.

1808. The Recent crinoids of the coasts of Africa. By Austin Hobart Clark. Pp. 1-51. March 15, 1911.

1809. Mammals collected by Dr. W. L. Abbott on Borneo and some of the small adjacent islands. By Marcus Ward Lyon, Jr. Pp. 53-146, 2 figs., 7 pls. Apr. 25, 1911.

1810. Notes on the distribution of millipeds in southern Texas, with descriptions of new genera and species from Texas, Arizona, Mexico, and Costa Rica. By O. F. Cook. Pp. 147-167. Apr. 10, 1911.

Proc. No.

1811. Descriptions of a new genus and species of isopod crustacean of the family Idotheidae from the mouth of the Rio de la Plata, Argentina, South America. By Harriet Richardson. Pp. 169-171, 5 figs. Apr. 10, 1911.

1812. Descriptions of six new genera and thirty-one new species of ichneumon flies. By H. L. Viereck. Pp. 173-196. Apr. 17, 1911.

1813. Final supplement of the catalogue of the published writings of Charles Abiathar White, 1897-1908. By Timothy W. Stanton. Pp. 197-199. Apr. 10, 1911.

1814. Notes upon two rare flatfishes (*Gymnachirus fasciatus* Günther and *G. nudus* Kaup). By W. C. Kendall. Pp. 201-203, 2 figs. Apr. 10, 1911.

1815. Descriptions of tineoid moths (Microlepidoptera) from South America. By August Busck. Pp. 205-230, 2 pls. Apr. 13, 1911.

1816. An electric ray and its young from the west coast of Florida. By Barton A. Bean and Alfred C. Weed. Pp. 231-232, 2 pls. Apr. 13, 1911.

1817. A new trematode (*Styphlodora bascaniensis*) with a blind Laurer's canal. By Joseph Goldberger. Pp. 233-239, 3 figs. Apr. 11, 1911.

1818. Bees in the collection of the United States National Museum. 2. By T. D. A. Cockerell. Pp. 241-264. Apr. 11, 1911.

1819. The Hoffman Philip Abyssinian ethnological collection. By Walter Hough. Pp. 265-276, 23 pls. May 18, 1911.

1820. New species of shells from Bermuda. By William Healey Dall and Paul Bartsch. Pp. 277-288, 1 pl. May 8, 1911.

1821. A revision of several genera of gymnospermous plants from the Potomac group in Maryland and Virginia. By Edward W. Berry. Pp. 289-318. May 8, 1911.

1822. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 9.] Descriptions of three new fishes of the family Chaetodontidae from the Philippine Islands. By Hugh M. Smith and Lewis Radcliffe. Pp. 319-326, 3 figs. Apr. 17, 1911.

1823. The Recent and fossil mollusks of the genus *Cerithiopsis* from the west coast of America. By Paul Bartsch. Pp. 327-367, 6 pls. May 8, 1911.

1824. Notes on the genus *Lepomis*. By Barton A. Bean and Alfred C. Weed. Pp. 369-376, 9 pls. May 6, 1911.

1825. Remarks on the long-tailed shrews of the eastern United States, with description of a new species. By N. Hollister. Pp. 377-381. Apr. 17, 1911.

1826. The Recent and fossil mollusks of the genus *Bittium* from the west coast of America. By Paul Bartsch. Pp. 383-414, 8 pls. May 12, 1911.

1827. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 10.] New genera of starfishes from the Philippine Islands. By Walter K. Fisher. Pp. 415-427. May 17, 1911.

1828. Two amphibians, one of them new, from the Carboniferous of Illinois. By Roy L. Moodie. Pp. 429-433, 2 figs. May 8, 1911.

1829. New mollusks of the genus *Aclis* from the North Atlantic. By Paul Bartsch. Pp. 435-438, 1 pl. May 18, 1911.

1830. Descriptions of new Hymenoptera. 2. By J. C. Crawford. Pp. 439-449. May 12, 1911.

1831. New tropical millipeds of the order Merocheta, with an example of kinetic evolution. By O. F. Cook. Pp. 451-473, 10 figs., 1 pl. May 31, 1911.

1832. Descriptions of one new genus and eight new species of ichneumon-flies. By H. L. Viereck. Pp. 475-480. Apr. 17, 1911.

1833. On the supposed origin of the moldavites and like sporadic glasses from various sources. By George P. Merrill. Pp. 481-486, 2 pls. May 31, 1911.

1834. Notes on insects of the order Strepsiptera, with descriptions of new species. By W. Dwight Pierce. Pp. 487-511. May 17, 1911.

1835. The relation of bornite and chalcocite in the copper ores of the Virgilina district of North Carolina and Virginia. By Francis Baker Laney. Pp. 513-524, 1 fig., 7 pls.

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1836. Descriptions of new genera and species of fishes from Japan and the Riu Kiu Islands. By John Otterbein Snyder. Pp. 525-549. May 26, 1911.

1837. Descriptions of new species of wasps with notes on described species. By S. A. Rohwer. Pp. 551-587. May 26, 1911.

1838. Preliminary notices of some new Pacific cephalopods. By S. Stillman Berry. Pp. 589-592. May 31, 1911.

1839. Fresh-water sponges in the collection of the United States National Museum.—Part V. A new genus proposed, with *Heteromeyenia radiospiculata* Mills as type. By Nelson Annandale. Pp. 593-594. May 26, 1911.

1840. A revision of the forms of the hairy woodpecker (*Dryobates villosus* [Linnaeus]). By Harry C. Oberholser. Pp. 595-621, 1 pl. June 3, 1911.

1841. Description of a new species of *Aega* from the Atlantic coast of the United States. By Harriet Richardson. Pp. 623-624, 4 figs. Apr. 10, 1911.

1842. The hothouse milliped as a new genus. By O. F. Cook. Pp. 625-631. June 11, 1911.

1843. Descriptions of a new genus and species of Janiridae from the Northwest Pacific. By Harriet Richardson. Pp. 633-635, 1 fig. June 7, 1911.

1844. A new cestode from an African bustard. By Brayton Howard Ransom. Pp. 637-647, 7 figs. June 24, 1911.

1845. The systematic position of the crinoid genus *Marsupites*. By Austin Hobart Clark. Pp. 649-654. June 24, 1911.

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Proceedings of the United States National Museum, vol. 41. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); pp. 1-705 (Proceedings papers 1846-1879); pp. 707-719 (index); 211 figs., 61 pls. 1912.

1846. The structure and relationships of certain eleutherozoic Pelmatozoa. By Edwin Kirk. Pp. 1-137, 11 pls. June 7, 1911.

1847. A revision of the forms of the ladder-backed woodpecker (*Dryobates scalaris* [Wagler]). By Harry C. Oberholser. Pp. 139-159, 1 pl. June 30, 1911.

1848. Descriptions of recently discovered Cladocera from New England. By Alfred A. Doolittle. Pp. 161-170, 7 pls. July 15, 1911.

1849. A new unstalked crinoid from the Philippine Islands. By Austin Hobart Clark. Pp. 171-173. June 24, 1911.

1850. The crinoid fauna of the Knobstone formation. By Frank Springer. Pp. 175-208. June 24, 1911.

1851. The Waverlyan period of Tennessee. By Ray S. Bassler. Pp. 209-224. June 24, 1911.

1852. Names applied to bees of the genus *Nomada,* found in North America. By T. D. A. Cockerell. Pp. 225-243. June 30, 1911.

1853. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-10.—No. 12.] Notes on some fishes of the genus *Amia,* family of Cheilodipteridae, with descriptions of four new species from the Philippine Islands. By Lewis Radcliffe. Pp. 245-261, 3 figs., 6 pls. July 15, 1911.

1854. The west American mollusks of the genus *Amphithalamus*. By Paul Bartsch. Pp. 263-265, 3 figs. June 30, 1911.

1855. Descriptions of new Hymenoptera. No. 3. By J. C. Crawford. Pp. 267-282, 6 figs. June 30, 1911.

1856. Description of a new amphisbaenoid lizard from Peru. By Leonhard Stejneger. Pp. 283-284. July 15, 1911.

1857. Descriptions of three new batrachians from Costa Rica and Panama. By Leonhard Stejneger. Pp. 285-288. Aug. 14, 1911.

1858. The west American mollusks of the genus *Nodulus*. By Paul Bartsch. Pp. 289-291, 4 figs. Aug. 22, 1911.

1859. Descriptions of one new genus and three new species of ichneumon flies. By H. L. Viereck. Pp. 293-295. Aug. 28, 1911.

1860. A new fossil alligator from the Hell Creek beds of Montana. By Charles W. Gilmore. Pp. 297-302, 1 fig., 2 pls. Sept. 9, 1911.

Proc. No.

1861. New marine mollusks from Bermuda. By Paul Bartsch. Pp. 303-306, 1 pl. Oct. 12, 1911.

1862. A revision of the fossil ferns from the Potomac group which have been referred to the genera *Cladophlebis* and *Thyrsopteris*. By Edward W. Berry. Pp. 307-332. Oct. 6, 1911.

1863. The Recent and fossil mollusks of the genus *Alvania* from the west coast of America. By Paul Bartsch. Pp. 333-362, 4 pls. Nov. 15, 1911.

1864. Two new species of parasitic nematodes. By Brayton Howard Ransom. Pp. 363-369, 7 figs. Oct. 31, 1911.

1865. The American species of *Sphyradium* with an inquiry as to their generic relationships. By G. Dallas Hanna. Pp. 371-376, 4 figs. Oct. 14, 1911.

1866. New sawflies in the collections of the United States National Museum. By S. A. Rohwer. Pp. 377-411, 14 figs. Oct. 14, 1911.

1867. Crystallized variscite from Utah. By Waldemar T. Schaller. Pp. 413-430, 2 figs., 1 pl. Jan. 31, 1912.

1868. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 13.] Descriptions of fifteen new fishes of the family Cheilodipteridae, from the Philippine Islands and contiguous waters. By Lewis Radcliffe. Pp. 431-446, 5 pls. Jan. 31, 1912.

1869. Descriptions of new species of wasps in the collections of the United States National Museum. By S. A. Rohwer. Pp. 447-478, 24 figs. Jan. 22, 1912.

1870. A new mosasauroid reptile from the Cretaceous of Alabama. By Charles W. Gilmore. Pp. 479-484, 3 figs., 2 pls. Jan. 31, 1912.

1871. The west American mollusks of the genus *Cingula*. By Paul Bartsch. Pp. 485-488, 1 pl. Feb. 8, 1912.

1872. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 14.] Description of new notidanoid shark from the Philippine Islands representing a new family. By Hugh M. Smith. Pp. 489-491, 1 fig., 1 pl. Feb. 8, 1912.

1873. The characters of the fossil plant *Gigantopteris* Schenk and its occurrence in North America. By David White. Pp. 493-516, 7 pls. Feb. 8, 1912.

1874. Description of a new salamander from Iowa. By Alexander G. Ruthven. Pp. 517-519. Jan. 22, 1912.

1875. A review of the Sparidae and related families of perch-like fishes found in the waters of Japan. By David Starr Jordan and William Francis Thompson. Pp. 521-601, 15 figs. Jan. 22, 1912.

1876. The Crustacea of the order Cumacea in the collection of the United States National Museum. By William T. Calman. Pp. 603-676, 112 figs. Apr. 6, 1912.

1877. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-10.—No. 15.] The squaloid sharks of the Philippine Archipelago, with descriptions of new genera and species. By Hugh M. Smith. Pp. 677-685, 4 figs., 5 pls. Feb. 8, 1912.

1878. The mounted skeletons of *Camptosaurus* in the United States National Museum. By Charles W. Gilmore. Pp. 687-696, 4 figs., 7 pls. Feb. 8, 1912.

1879. Preservation of osseous and horny tissue. By F. L. J. Boettcher. Pp. 697-705. Jan. 22, 1912.

Volume 42

Proceedings of the United States National Museum, vol. 42. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); pp. 1-655 (Proceedings papers 1880-1922); pp. 657-675 (index); 101 figs., 76 pls. 1912.

1880. Descriptions of new Hymenoptera, No. 4. By J. C. Crawford. Pp. 1-10, 2 figs. March 6, 1912.

1881. A revision of the forms of the edible-nest swiftlet, *Collocalia fuciphaga* (Thunberg). By Harry C. Oberholser. Pp. 11-20. Mar. 6, 1912.

1882. A small collection of bats from Panama. By Gerrit S. Miller, Jr. Pp. 21-26. Mar. 6, 1912.

Proc. No.

1883. Description of a new species of isopod of the genus *Cleantis* from Japan. By Harriet Richardson. Pp. 27-29, 1 fig. Mar. 6, 1912.

1884. On an important specimen of *Edestus;* with description of a new species, *Edestus mirus.* By Oliver Perry Hay. Pp. 31-38, 2 pls. Apr. 25, 1912.

1885. Descriptions of new species and genera of Lepidoptera, chiefly from Mexico. By Harrison G. Dyar. Pp. 39-106. Mar. 6, 1912.

1886. Description of a new species of the isopod genus *Cassidinidea* from Mexico. By Harriet Richardson. Pp. 107-108, 3 figs. Mar. 6, 1912.

1887. Censers and incense of Mexico and Central America. By Walter Hough. Pp. 109-137, 12 figs., 12 pls. Apr. 7, 1912.

1888. Descriptions of five new genera and twenty-six new species of ichneumon-flies. By H. L. Viereck. Pp. 139-153. Mar. 9, 1912.

1889. Systematic notes and descriptions of some weevils of economic or biological importance. By W. Dwight Pierce. Pp. 155-170. Mar. 19, 1912.

1890. Variation of the skull and horns of the Isabella gazelle. By Gerrit S. Miller, Jr. Pp. 171-172, 1 pl. Apr. 13, 1912.

1891. Description of a new isopod crustacean belonging to the genus *Livoneca* from the Atlantic coast of Panama. By Harriet Richardson. Pp. 173-174, 1 fig. Mar. 19, 1912.

1892. A new nematode, *Ostertagia bullosa,* parasitic in the alimentary tract of sheep. By Brayton Howard Ransom and Maurice C. Hall. Pp. 175-179, 4 figs. Feb. 28, 1912.

1893. Instructions for collecting and fixing rotifers in bulk. By P. de Beauchamp. Pp. 181-185. Mar. 19, 1912.

1894. Marine and terrestrial isopods from Jamaica. By Harriet Richardson. Pp. 187-194, 3 figs. Apr. 5, 1912.

1895. *Naumachocrinus,* a new genus belonging to the crinoid family Phrynocrinidae. By Austin Hobart Clark. Pp. 195-197. Mar. 19, 1912.

1896. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910.—No. 16.] New pediculate fishes from the Philippine Islands and contiguous waters. By Lewis Radcliffe. Pp. 199-214, 3 figs., 12 pls. Apr. 30, 1912.

1897. Names applied to bees of the genus *Osmia,* found in North America. By T. D. A. Cockerell. Pp. 215-225. Apr. 13, 1912.

1898. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910.—No. 17.] New arenaceous Foraminifera from the Philippine Islands and contiguous waters. By Joseph A. Cushman. Pp. 227-230, 1 pl. Apr. 16, 1912.

1899. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910.—No. 18.] The chimaeroid fishes of the Philippine Islands, with description of a new species. By Hugh M. Smith. Pp. 231-232, 1 pl. Apr. 13, 1912.

1900. Descriptions of new species of parasitic copepods in the collections of the United States National Museum. By Charles Branch Wilson. Pp. 233-243, 5 pls. Apr. 30, 1912.

1901. Notes on fresh-water Copepoda in the United States National Museum. By C. Dwight Marsh. Pp. 245-255, 14 figs. Apr. 25, 1912.

1902. Descriptions of certain species of wasps of the family Sphecidae. By Henry T. Fernald. Pp. 257-259. Apr. 25, 1912.

1903. Additions to the west American pyramidellid mollusk fauna, with descriptions of new species. By Paul Bartsch. Pp. 261-289, 4 pls. May 17, 1912.

1904. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910—No. 19.] Diagnoses of new barnacles from the Philippine Archipelago and China Sea. By Henry A. Pilsbry. Pp. 291-294. May 29, 1912.

1905. A second meteoric find from Scott County, Kansas. By George P. Merrill. Pp. 295-296, 1 pl. June 15, 1912.

Proc. No.

1906. A zoogeographic study based on the pyramidellid mollusks of the west coast of America. By Paul Bartsch. Pp. 297-349, 1 pl. June 15, 1912.

1907. New cyclogasterid fishes from Japan. By C. H. Gilbert and C. V. Burke. Pp. 351-380, 18 figs., 8 pls. July 3, 1912.

1908. Some new Mollusca from the Silurian formations of Washington County, Maine. By Henry Shaler Williams. Pp. 381-398, 2 pls. July 3, 1912.

1909. Japanese shore fishes collected by the United States Bureau of Fisheries steamer *Albatross* Expedition of 1906. By John Otterbein Snyder. Pp. 399-450, 1 fig., 11 pls. Aug. 30, 1912.

1910. Notes on African Orthoptera of the families Mantidae and Phasmidae in the United States National Museum, with descriptions of new species. By James A. G. Rehn. Pp. 451-475, 17 figs. Aug. 29, 1912.

1911. Description of a new terrestrial isopod belonging to the genus *Cubaris* from Panama. By Harriet Richardson. Pp. 477-479, 2 figs. Aug. 29, 1912.

1912. A new discodrilid worm from Colorado. By Max M. Ellis. Pp. 481-486, 5 figs. Aug. 29, 1912.

1913. The fishes of Okinawa, one of the Riu Kiu Islands. By John Otterbein Snyder. Pp. 487-519, 9 pls. Aug. 30, 1912.

1914. Descriptions of two new parasitic isopods belonging to the genera *Palaegyge* and *Probopyrus* from Panama. By Harriet Richardson. Pp. 521-524, 8 figs. Aug. 29, 1912.

1915. Descriptions of two new species of fishes, from Honolulu, Hawaii. By David Starr Jordan and Charles William Metz. Pp. 525-527, 1 pl. Aug. 30, 1912.

1916. A revision of the subspecies of the green heron *(Butorides virescens* [Linnaeus]). By Harry C. Oberholser. Pp. 529-577. Aug. 29, 1912.

1917. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910.—No. 20.] Description of a new family of pediculate fishes from Celebes. By Hugh M. Smith and Lewis Radcliffe. Pp. 579-581, 1 pl. Aug. 30, 1912.

1918. Description of a new species of isopod belonging to the genus *Apseudes* from Ecuador. By Harriet Richardson. Pp. 583-585, 1 fig. Aug. 29, 1912.

1919. Notes on a collection of fishes from Java, made by Owen Bryant and William Palmer in 1909, with description of a new species. By Barton A. Bean and Alfred C. Weed. Pp. 587-611, 3 figs., 3 pls. Aug. 30, 1912.

1920. Contributions to our knowledge of bees and ichneumon-flies, including the descriptions of twenty-one new genera and fifty-seven new species of ichneumon-flies. By H. L. Viereck. Pp. 613-648, 2 figs. Aug. 29, 1912.

1921. Model of a Brahmin temple. By Immanuel M. Casanowicz. Pp. 649-653, 1 pl. Aug. 30, 1912.

1922. Note on the generic name *Safole,* replacing *Boulengerina,* for a genus of kuhliid fishes. By David Starr Jordan. P. 655. Aug. 29, 1912.

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Proceedings of the United States National Museum, vol. 43. Pp. i-xi (title page, advertisement, table of contents, and list of illustrations); pp. 1-658 (Proceedings papers 1923-1945); pp. 659-669 (index); 49 figs., 46 pls. 1913.

1923. Descriptions of the Alcyonaria collected by the U. S. Fisheries steamer *Albatross,* mainly in Japanese waters, during 1906. By Charles C. Nutting. Pp. 1-104, 21 pls. Nov. 23, 1912.

1924. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910.—No. 21.] Descriptions of a new family, two new genera, and twenty-nine new species of anacanthine fishes from the Philippine Islands and contiguous waters. By Lewis Radcliffe. Pp. 105-140, 11 figs., 10 pls. Sept. 27, 1912.

1925. Studies in the woodwasp superfamily Oryssoidea, with descriptions of new species. By S. A. Rohwer. Pp. 141-158, 6 figs., 2 pls. Sept. 27, 1912.

Proc. No.

1926. Descriptions of two new isopods, an *Apseudes* and a *Munnopsis*, both from the Galapagos Islands. By Harriet Richardson. Pp. 159-162, 4 figs. Sept. 7, 1912.

1927. Descriptions of new Hymenoptera, No. 5. By J. C. Crawford. Pp. 163-188, 2 figs. Sept. 7, 1912.

1928. Dragon flies of the Cumberland Valley in Kentucky and Tennessee. By Charles Branch Wilson. Pp. 189-200. Sept. 7, 1912.

1929. Descriptions of a new genus of isopod crustaceans, and of two new species from South America. By Harriet Richardson. Pp. 201-204, 2 figs. Sept. 27, 1912.

1930. Notes on sawflies, with descriptions of new species. By S. A. Rohwer. Pp. 205-251, 6 figs. Sept. 30, 1912.

1931. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 22.] Preliminary account of one new genus and three new species of Medusae from the Philippines. By Henry B. Bigelow. Pp. 253-260. Nov. 20, 1912.

1932. Names applied to the eucerine bees of North America. By T. D. A. Cockerell. Pp. 261-273. Oct. 19, 1912.

1933. Bryozoa from Labrador, Newfoundland, and Nova Scotia, collected by Dr. Owen Bryant. By Raymond C. Osburn. Pp. 275-289, 1 pl. Nov. 20, 1912.

1934. New American dipterous insects of the family Pipunculidae. By J. R. Malloch. Pp. 291-299, 9 figs. Oct. 9, 1912.

1935. Descriptions of new genera and species of muscoid flies from the Andean and Pacific coast regions of South America. By Charles H. T. Townsend. Pp. 301-367. Nov. 22, 1912.

1936. Notes on certain amphipods from the Gulf of Mexico, with descriptions of new genera and new species. By Arthur S. Pearse. Pp. 369-379, 8 figs. Nov. 20, 1912.

1937. The crinoids of the Museum fuer Naturkunde, Berlin. By Austin Hobart Clark. Pp. 381-410. Nov. 20, 1912.

1938. The insects of the dipterous family Phoridae in the United States National Museum. By J. R. Malloch. Pp. 411-529, 7 pls. Dec. 14, 1912.

1939. A revision of the forms of the great blue heron *(Ardea herodias* Linnaeus). By Harry C. Oberholser. Pp. 531-559. Dec. 12, 1912.

1940. Notes on the occurrence of the crustacean *Alonopsis* in America, with description of a new species. By Alfred A. Doolittle. Pp. 561-565, 2 pls. Dec. 31, 1912.

1941. A new genus and six new species of fishes of the family Cyclogasteridae. By Charles Victor Burke. Pp. 567-574. Dec. 12, 1912.

1942. Descriptions of one new family, eight new genera, and thirty-three new species of ichneumon-flies. By H. L. Viereck. Pp. 575-593. Dec. 31, 1912.

1943. A newly found meteroric iron from Perryville, Perry County, Missouri. By George P. Merrill. Pp. 595-597, 2 pls. Dec. 31, 1912.

1944. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 23.] Four new genera and fifty-eight new species of starfishes from the Philippine Islands, Celebes, and the Moluccas. By Walter K. Fisher. Pp. 599-648. Feb. 5, 1913.

1945. One new genus and eight new species of dipterous insects in the United States National Museum collection. By J. R. Malloch. Pp. 649-658, 1 pl. Dec. 31, 1912.

Volume 44

Proceedings of the United States National Museum, vol. 44. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); pp. 1-654 (Proceedings papers 1946-1975); pp. 655-666 (index); 92 figs., 82 pls. 1913.

1946. Medusae and siphonophorae collected by the U. S. Fisheries steamer *Albatross* in the northwestern Pacific, 1906. By Henry B. Bigelow. Pp. 1-119, 2 figs., 6 pls. Mar. 26, 1913.

Proc. No.

1947. Descriptions of new species of saturnian moths in the collection of the United States National Museum. By Harrison G. Dyar. Pp. 121-134. Feb. 11, 1913.

1948. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 24.] Descriptions of seven new genera and thirty-one new species of fishes of the families Brotulidae and Carapidae from the Philippine Islands and the Dutch East Indies. By Lewis Radcliffe. Pp. 135-176, 11 pls. Apr. 3, 1913.

1949. Results of the Yale Peruvian Expedition of 1911. Orthoptera (Acridiidae—short-horned locusts). By Lawrence Bruner. Pp. 177-187. Feb. 11, 1913.

1950. Crustacean parasites of West Indian fishes and land crabs, with descriptions of new genera and species. By Charles Branch Wilson. Pp. 189-277, 36 pls. Apr. 3, 1913.

1951. Descriptions of new Lepidoptera, chiefly from Mexico. By Harrison G. Dyar. Pp. 279-324. Feb. 11, 1913.

1952. A newly found meteorite from near Cullison, Pratt County, Kansas. By George P. Merrill. Pp. 325-330, 2 pls. Apr. 12, 1913.

1953. A revision of the South American dipterous insects of the family Ptychopteridae. By Charles P. Alexander. Pp. 331-335, 3 figs. Feb. 20, 1913.

1954. Terrestrial isopods collected in Costa Rica by Mr. Picado, with the description of a new genus and species. By Harriet Richardson. Pp. 337-340, 5 figs. Feb. 20, 1913.

1955. Some fossil insects from Florissant, Colorado. By T. D. A. Cockerell. Pp. 341-346, 3 figs., 1 pl. Apr. 30, 1913.

1956. Results of the Yale Peruvian Expedition of 1911. Orthoptera (exclusive of Acridiidae). By A. N. Caudell. Pp. 347-357. Apr. 20, 1913.

1957. Description of *Anguilla manabei*, a new eel from Japan. By David Starr Jordan. Pp. 359-360, 1 pl. Apr. 3, 1913.

1958. Descriptions of new species of American flies of the family Borboridae. By J. R. Malloch. Pp. 361-372. Feb. 20, 1913.

1959. The sipunculids of the eastern coast of North America. By John Hiram Gerould. Pp. 373-437, 18 figs., 5 pls. Apr. 12, 1913.

1960. Results of the Yale Peruvian Expedition of 1911. Hymenoptera, superfamilies Vespoidea and Sphecoidea. By S. A. Rohwer. Pp. 439-454, 1 fig. Feb. 10, 1913.

1961. Notes on *Ranzania makua* Jenkins and other species of fishes of rare occurrence on the California coast. By John Otterbein Snyder. Pp. 455-460, 1 pl. Apr. 12, 1913.

1962. Two new species of Diptera in the United States National Museum collection. By J. R. Malloch. Pp. 461-463. Feb. 20, 1913.

1963. Descriptions of two new fishes of the genus *Triglops* from the Atlantic coast of North America. By Charles H. Gilbert. Pp. 465-468, 1 pl. Apr. 30, 1913.

1964. Results of the Yale Peruvian Expedition of 1911. Hymenoptera—Ichneumonoidea. By H. L. Viereck. Pp. 469-470. Feb. 10, 1913.

1965. A synopsis of the American minks. By N. Hollister. Pp. 471-480. Apr. 18, 1913.

1966. A synopsis of part of the Neotropical crane-flies of the subfamily Limnobinae. By Charles P. Alexander. Pp. 481-549, 4 pls. Apr. 30, 1913.

1967. Description of a new species of actinian of the genus *Edwardsiella* from southern California. By J. Playfair McMurrich. Pp. 551-553, 1 fig. Apr. 18, 1913.

1968. Descriptions of ten new genera and twenty-three new species of ichneumon-flies. By H. L. Viereck. Pp. 555-568. Apr. 18, 1913.

1969. Notes on some fossil horses, with descriptions of four new species. By Oliver P. Hay. Pp. 569-594, 28 figs., 5 pls. Apr. 30, 1913.

1970. Notes on Nearctic orthopterous insects. I. Non-saltatorial forms. By A. N. Caudell. Pp. 595-614, 27 figs. Apr. 18, 1913.

1971. Descriptions of new species of crabs of the family Ocypodidae. By Mary J. Rathbun. Pp. 615-620, 3 pls. Apr. 30, 1913.

Proc. No.

1972. Notes on some American Diptera of the genus *Fannia*, with descriptions of new species. By J. R. Malloch. Pp. 621-631, 1 pl. Apr. 30, 1913.

1973. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 25.] New Textulariidae and other arenaceous Foraminifera from the Philippine Islands and contiguous waters. By Joseph A. Cushman. Pp. 633-638, 3 pls. Apr. 30, 1913.

1974. Descriptions of six new genera and twelve new species of ichneumon-flies. By H. L. Viereck. Pp. 639-648. Apr. 18, 1913.

1975. A recently mounted zeuglodon skeleton in the United States Museum. By James W. Gidley. Pp. 649-654, 3 figs., 2 pls. Apr. 30, 1913.

Volume 45

Proceedings of the United States National Museum, vol. 45. Pp. i-xi (title page, advertisement, table of contents, and list of illustrations); pp. 1-657 (Proceedings papers 1976-2007); pp. 659-669 (index); 43 figs., 57 pls. 1913.

1976. Treeshrews: An account of the mammalian family Tupaiidae. By Marcus Ward Lyon, Jr. Pp. 1-188, 29 figs., 11 pls. Nov. 29, 1913.

1977. A systematic monograph of the chalcinoid Hymenoptera of the subfamily Signiphorinae. By A. Arsène Girault. Pp. 189-233. May 22, 1913.

1978. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 26.] The giant species of the molluscan genus *Lima* obtained in Philippine and adjacent waters. By Paul Bartsch. Pp. 235-240, 9 pls. June 13, 1913.

1979. Descriptions of new Hymenoptera, No. 6. By J. C. Crawford. Pp. 241-260, 2 figs. May 22, 1913.

1980. A fossil flower from the Eocene. By Edward W. Berry. Pp. 261-263, 1 fig., 1 pl. June 13, 1913.

1981. A synopsis, and descriptions of the Nearctic species of sawflies of the genus *Xyela*, with descriptions of other new species of sawflies. By S. A. Rohwer. Pp. 265-281, 1 fig. May 22, 1913.

1982. Fossil Coleoptera from Florissant in the United States National Museum. By H. F. Wickham. Pp. 283-303, 5 pls. June 13, 1913.

1983. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 27.] The Philippine mollusks of the genus *Dimya*. By Paul Bartsch. Pp. 305-307, 2 pls. June 13, 1913.

1984. Descriptions of new Hymenoptera, No. 7. By J. C. Crawford. Pp. 309-317, 1 fig. May 22, 1913.

1985. New species of Silurian fossils from the Edmunds and Pembroke formations of Washington County, Maine. By Henry Shaler Williams. Pp. 319-352, 3 pls. July 22, 1913.

1986. New parasitic Hymenoptera belonging to the trible Xoridini. By S. A. Rohwer. Pp. 353-361. May 22, 1913.

1987. Three interesting butterflies from eastern Massachusetts. By Austin Hobart Clark. Pp. 363-364, 1 pl. June 13, 1913.

1988. Miscellaneous contributions to the knowledge of the weevils of the families Attelabidae and Brachyrhinidae. By W. Dwight Pierce. Pp. 365-426. May 23, 1913.

1989. The simple ascidians from the northeastern Pacific in the collection of the United States National Museum. By William E. Ritter. Pp. 427-505, 4 pls. June 25, 1913.

1990. Mammals collected by the Smithsonian-Harvard Expedition to the Altai Mountains, 1912. By N. Hollister. Pp. 507-532, 6 pls. June 21, 1913.

1991. Descriptions of thirteen new species of parasitic Hymenoptera and a table to certain species of the genus *Ecphylus*. By S. A. Rohwer. Pp. 533-540. June 21, 1913.

1992. Results of the Yale Peruvian Expedition of 1911.—Batrachians and reptiles. By Leonhard Stejneger. Pp. 541-547. June 4, 1913.

Proc. No.

1993. New land shells from the Philippine Islands. By Paul Bartsch. Pp. 549-553, 1 pl. June 21, 1913.

1994. Description of a new fossil fern of the genus *Gleichenia* from the Upper Cretaceous of Wyoming. By Frank H. Knowlton. Pp. 555-558, 1 pl. June 21, 1913.

1995. The isopod genus *Ichthyoxenus* Herklots, with description of a new species from Japan. By Harriet Richardson. Pp. 559-562, 6 figs. June 4, 1913.

1996. Some new Hawaiian cephalopods. By S. Stillman Berry. Pp. 563-566. June 4, 1913.

1997. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 28.] The hemiscylliid sharks of the Philippine Archipelago, with description of a new genus from the China Sea. By Hugh M. Smith. Pp. 567-569, 2 figs., 1 pl. June 21, 1913.

1998. Notes on a small collection of amphipods from the Pribilof Islands, with descriptions of new species. By A. S. Pearse. Pp. 571-573, 2 figs. June 4, 1913.

1999. Description of the Yachats "smelt," a new species of atherinoid fish from Oregon. By David Starr Jordan and John Otterbein Snyder. Pp. 575-576, 1 pl. June 21, 1913.

2000. Two fossil insects from Florissant, Colorado, with a discussion of the venation of the aeshnine dragon-flies. By T. D. A. Cockerell. Pp. 577-583, 3 figs. June 21, 1913.

2001. Results of the Yale Peruvian Expedition of 1911. Orthoptera (Addenda to the Acrididae—short-horned locusts). By Lawrence Bruner. Pp. 585-586. June 11, 1913.

2002. Diagnoses of new shells from the Pacific Ocean. By William Healey Dall. Pp. 587-597. June 11, 1913.

2003. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 29.] Description of a new carcharioid shark from the Sulu Archipelago. By Hugh M. Smith. Pp. 599-601, 3 figs., 1 pl. June 21, 1913.

2004. Three new species of Anthomyidae (Diptera) in the United States National Museum collection. By J. R. Malloch. Pp. 603-607. June 11, 1913.

2005. The Mount Lyell copper district of Tasmania. By Chester G. Gilbert and Joseph E. Pogue. Pp. 609-625, 1 fig., 4 pls. July 22, 1913.

2006. Results of the Yale Peruvian Expedition of 1911. Lepidoptera. By Harrison G. Dyar. Pp. 627-649. July 22, 1913.

2007. Description of *Mesoplodon mirum*, a beaked whale recently discovered on the coast of North America. By Frederick W. True. Pp. 651-657, 1 fig., 6 pls. Nov. 29, 1913.

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Proceedings of the United States National Museum, vol. 46. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); pp. 1-668 (Proceedings papers 2008-2042); pp. 669-681 (index); 202 figs., 57 pls. 1914.

2008. New genera and species of Thysanoptera, with notes on distribution and food plants. By A. C. Morgan. Pp. 1-55, 79 figs. Aug. 23, 1913.

2009. Notes on an unusually fine slab of fossil crinoids. By R. S. Bassler. Pp. 57-59, 2 pls. Nov. 29, 1913.

2010. New parasitic Hymenoptera of the genus *Eiphosoma*. By T. D. A. Cockerell. Pp. 61-64. Aug. 23, 1913.

2011. Notes on a collection of fishes from the Island of Shikoku in Japan, with a description of a new species, *Gnathypops iyonis*. By David Starr Jordan and William Francis Thompson. Pp. 65-72, 5 figs. Aug. 23, 1913.

2012. A new nematode, *Rictularia splendida*, from the coyote, with notes on other coyote parasites. By Maurice C. Hall. Pp. 73-84, 6 figs. Aug. 23, 1913.

2013. Notes on the bats of the genus *Molossus*. By Gerrit S. Miller, Jr. Pp. 85-92. Aug. 23, 1913.

Proc. No.

2014. Preliminary report on a recently discovered Pleistocene cave deposit near Cumberland, Maryland. By James Williams Gidley. Pp. 93-102, 8 figs. Aug. 23, 1913.

2015. New moth-flies (Psychodidae) bred from Bromeliaceae and other plants. By Frederick Knab. Pp. 103-106. Aug. 23, 1913.

2016. New mollusks from the Bahama Islands. By Paul Bartsch. Pp. 107-109, 1 pl. Nov. 29, 1913.

2017. Notes on the Odonata, or dragonflies, of Bumping Lake, Washington. By Clarence Hamilton Kennedy. Pp. 111-126, 57 figs. Sept. 30, 1913.

2018. A synopsis of the genera of Agromyzidae, with descriptions of new genera and species. By J. R. Malloch. Pp. 127-154, 3 pls. Dec. 6, 1913.

2019. A new sponge from the New Jersey Cretaceous. By Hervey W. Shimer and Sidney Powers. Pp. 155-156, 1 pl. Dec. 6, 1913.

2020. The variation exhibited by mainland and island specimens of the Hibakari snake, *Natrix vibakari* (Boie). By J. C. Thompson. Pp. 157-160. Sept. 30, 1913.

2021. The extinct bisons of North America, with description of one new species, *Bison regius*. By Oliver P. Hay. Pp. 161-200, 10 figs., 12 pls. Dec. 6, 1913.

2022. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 30.] New starfishes from the Philippine Islands, Celebes, and the Moluccas. By Walter K. Fisher. Pp. 201-224. Sept. 30, 1913.

2023. On a brackish water Pliocene fauna of the southern Coastal Plain. By William Healey Dall. Pp. 225-237, 3 pls. Dec. 6, 1913.

2024. The genera of flies in the subfamily Botanobiinae with hind tibial spur. By J. R. Malloch. Pp. 239-266, 2 pls. Dec. 6, 1913.

2025. Camels of the fossil genus *Camelops*. By Oliver P. Hay. Pp. 267-277, 1 fig., 2 pls. Dec. 6, 1913.

2026. Revision of the crinoid genus *Himerometra*. By Austin Hobart Clark. Pp. 279-289. Nov. 25, 1913.

2027. A review of the fishes of the genus *Osmerus* of the California coast. By Mary Fisk. Pp. 291-297, 1 fig. Nov. 25, 1913.

2028. A review of the Philippine land mammals in the United States National Museum. By N. Hollister. Pp. 299-341, 3 pls. Dec. 31, 1913.

2029. Descriptions of new Hymenoptera, No. 8. By J. C. Crawford. Pp. 343-352, 8 figs. Dec. 23, 1913.

2030. Descriptions of new species of crabs of the families Grapsidae and Ocypodidae. By Mary J. Rathbun. Pp. 353-358, 4 pls. Dec. 31, 1913.

2031. Descriptions of twenty-three new genera and thirty-one new species of ichneumon-flies. By Henry L. Viereck. Pp. 359-386. Dec. 31, 1913.

2032. A list of the Rotatoria of Washington and vicinity, with descriptions of a new genus and ten new species. By Harry K. Harring. Pp. 387-405, 5 pls. Dec. 31, 1913.

2033. Gad-flies (Tabanidae) of the genus *Stibasoma*. By Frederick Knab. Pp. 407-412. Dec. 23, 1913.

2034. Revision of the bats of the genus *Glossophaga*. By Gerrit S. Miller, Jr. Pp. 413-429, 1 fig. Dec. 31, 1913.

2035. New Hymenoptera from North America. By A. B. Gahan. Pp. 431-443, 1 pl. Dec. 30, 1913.

2036. Some new American pycnodont fishes. By James Williams Gidley. Pp. 445-449, 6 figs. Dec. 31, 1913.

2037. North American spring-tails of the subfamily Tomocerinae. By Justus W. Folsom. Pp. 451-472, 10 figs., 2 pls. Dec. 30, 1913.

2038. Notes on the fossil crinoid genus *Homocrinus* Hall. By Edwin Kirk. Pp. 473-483, 1 pl. Feb. 14, 1914.

2039. New species of noctuid moths from tropical America. By William Schaus. Pp. 485-549. Jan. 29, 1914.

2040. Notes on a viviparous distome. By Edwin Linton. Pp. 551-555, 1 pl. Feb. 24, 1914.

Proc. No.

2041. A contribution toward a monograph of the homopterous insects of the family Delphacidae of North and South America. By David L. Crawford. Pp. 557-640, 6 pls. Mar. 4, 1914.

2042. Archeological investigations in Ste. Genevieve County, Missouri. By David I. Bushnell, Jr. Pp. 641-668, 8 figs., 8 pls. Mar. 4, 1914.

Volume 47

Proceedings of the United States National Museum, vol. 47. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); pp. 1-729 (Proceedings papers 2043-2063); pp. 731-755 (index); 23 figs., 56 pls. 1915.

2043. New genera and species of Microlepidoptera from Panama. By August Busck. Pp. 1-67. Apr. 30, 1914.

2044. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 31.] New species of crabs of the families Grapsidae and Ocypodidae. By Mary J. Rathbun. Pp. 69-85. May 7, 1914.

2045. Names applied to the North American bees of the genera *Lithurgus, Anthidium*, and allies. By T. D. A. Cockerell. Pp. 87-94. May 7, 1914.

2046. The noctuid moths of the genera *Palindia* and *Dyomyx*. By Harrison G. Dyar. Pp. 95-116. May 7, 1914.

2047. New genera and species of American brachyrhynchous crabs. By Mary J. Rathbun. Pp. 117-129, 5 figs., 10 pls. May 20, 1914.

2048. Hymenoptera, superfamilies Apoidea and Chalcidoidea, of the Yale Dominican Expedition of 1913. By J. C. Crawford. Pp. 131-134. Apr. 30, 1914.

2049. Two cottoid fishes from Monterey Bay, California. By Charles H. Gilbert. Pp. 135-137, 1 pl. May 20, 1914.

2050. Report on the Lepidoptera of the Smithsonian biological survey of the Panama Canal Zone. By Harrison G. Dyar. Pp. 139-350. May 20, 1914.

2051. The variations exhibited by *Thamnophis ordinoides* (Baird and Girard), a garter-snake inhabiting the Sausalito Peninsula, California. By Joseph C. Thompson. Pp. 351-360. May 16, 1914.

2052. Results of the Yale-Peruvian Expedition of 1911. Addendum to the Hymenoptera Ichneumonoidea. By P. R. Myers. Pp. 361-362. Oct. 24, 1914.

2053. A new pearly freshwater mussel of the genus *Hyria* from Brazil. By L. S. Frierson. P. 363, 1 pl. Oct. 29, 1914.

2054. Descriptions of new species and genera of Lepidoptera from Mexico. By Harrison G. Dyar. Pp. 365-409. Oct. 24, 1914.

2055. Littoral marine mollusks of Chincoteague Island, Virginia. By John B. Henderson and Paul Bartsch. Pp. 411-421, 2 pls. Oct. 29, 1914.

2056. Lepidoptera of the Yale-Dominican Expedition of 1913. By Harrison G. Dyar. Pp. 423-426. Oct. 24, 1914.

2057. A systematic account of the grasshopper mice. By N. Hollister. Pp. 427-489, 3 figs., 1 pl. Oct. 29, 1914.

2058. Orthoptera of the Yale-Dominican Expedition of 1913. By A. N. Caudell. Pp. 491-495. Oct. 24, 1914.

2059. A peculiarity in the growth of the tail feathers of the giant hornbill *(Rhinoplax vigil)*. By Alex Wetmore. Pp. 497-500. Oct. 24, 1914.

2060. Notes on wolframite, beraunite, and axinite. By Edgar T. Wherry. Pp. 501-511. Oct. 24, 1914.

2061. Vespoid and sphecoid Hymenoptera collected in Guatemala by W. P. Cockerell. By S. A. Rohwer. Pp. 513-523. Oct. 24, 1914.

2062. Report on Rotatoria from Panama with descriptions of new species. By Harry K. Harring. Pp. 525-564, 9 pls. Dec. 15, 1914.

2063. North American parasitic copepods belonging to the Lernaeopodidae, with a revision of the entire family. By Charles Branch Wilson. Pp. 565-729, 15 figs., 32 pls. Mar. 6, 1915.

Volume 48

Proceedings of the United States National Museum, vol. 48. Pp. i-x (title page, advertisement, table of contents, and list of illustrations); pp. 1-661 (Proceedings papers 2064-2091); pp. 663-672 (index); 40 figs., 46 pls. 1915.

Proc. No.

2064. New North American bees of the genus *Andrena*. By Henry L. Viereck and T. D. A. Cockerell. Pp. 1-58. Nov. 28, 1914.

2065. The Crustacea Euphausiacea of the United States National Museum. By H. J. Hansen. Pp. 59-114, 4 pls. Jan. 19, 1915.

2066. List of generic names and their type-species in the coleopterous superfamily Scolytoidea. By A. D. Hopkins. Pp. 115-136. Dec. 16, 1914.

2067. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 32.] A new genus and some new species of crabs of the family Goneplacidae. By Mary J. Rathbun. Pp. 137-154. Dec. 16, 1914.

2068. Descriptions of new genera and species, with notes on parasitic Hymenoptera. By A. B. Gahan. Pp. 155-168. Dec. 16, 1914.

2069. Two new South American jaguars. By N. Hollister. Pp. 169-170, 1 pl. Dec. 16, 1914.

2070. Report on the parasitic and predaceous Diptera from northeastern New Mexico. By W. R. Walton. Pp. 171-186, 2 pls. Dec. 16, 1914.

2071. Descriptions of a new genus and species of the discodrilid worms. By Maurice C. Hall. Pp. 187-193, 3 figs. Dec. 16, 1914.

2072. New genera and species of gall midges. By E. Porter Felt. Pp. 195-211, 15 figs. Jan. 19, 1915.

2073. Report on the holothurians collected by the United States Fisheries steamer *Albatross* in the northwestern Pacific during the summer of 1906. By Hiroshi Ohshima. Pp. 213-291, 1 fig., 4 pls. Feb. 11, 1915.

2074. The Mississippi River bluffs at Columbus and Hickman, Kentucky, and their fossil flora. By Edward W. Berry. Pp. 293-303, 2 pls. Jan. 28, 1915.

2075. Fishes collected by the United States Fisheries steamer *Albatross* in southern California in 1904. By Charles Henry Gilbert. Pp. 305-380, 9 pls. Jan. 28, 1915.

2076. Descriptions of new African birds of the genera *Francolinus, Chalcopelia, Cinnyris, Chalcomitra, Anthreptes, Estrilda, Halcyon, Melittophagus,* and *Colius*. By Edgar A. Mearns. Pp. 381-394. Jan. 19, 1915.

2077. An extinct marsupial from the Fort Union with notes on the Myrmecobidae and other families of this group. By James Williams Gidley. Pp. 395-402, 1 pl. Jan. 28, 1915.

2078. Reptiles of northwestern Nevada and adjacent territory. By C. H. Richardson. Pp. 403-435. Jan. 19, 1915.

2079. On some generic names first mentioned in the "Conchological Illustrations." By William Healey Dall. Pp. 437-440. Jan. 10, 1915.

2080. Description of new species of crane-flies from Central America. By Charles P. Alexander. Pp. 441-444, 1 pl. Feb. 11, 1915.

2081. Synopsis of the species of sawflies belonging to the genus *Dimorphopteryx*. By S. A. Rohwer. Pp. 445-448. Feb. 11, 1915.

2082. Flounders and soles from Japan collected by the United States Bureau of Fisheries steamer *Albatross* in 1906. By Carl L. Hubbs. Pp. 449-496, 3 pls. Mar. 20, 1915.

2083. Notes on some sawfly larvae belonging to the genus *Dimorphopteryx*. By William Middleton. Pp. 497-501, 4 figs., 1 pl. Mar. 18, 1915.

2084. The Fisher, Polk County, Minnesota, meteorite. By George P. Merrill. Pp. 503-506, 1 pl. May 3, 1915.

2085. Descriptions of six new species of ichneumon-flies. By R. A. Cushman. Pp. 507-513. Mar. 8, 1915.

2086. Contributions to the knowledge of the mammals of the Pleistocene of North America. By Oliver P. Hay. Pp. 515-575, 5 figs., 8 pls. Apr. 8, 1915.

Proc. No.

2087. Descriptions of new Hymenoptera, No. 9. By J. C. Crawford. Pp. 577-586, 11 figs. May 3, 1915.

2088. A synopsis of the races of the long-tailed goatsucker, *Caprimulgus macrurus* Horsfield. By Harry C. Oberholser. Pp. 587-599. May 3, 1915.

2089. Notes on Neotropical dragonflies, or Odonata. By Edward Bruce Williamson. Pp. 601-638, 1 fig., 7 pls. May 12, 1915.

2090. A review of the subspecies of the ruddy kingfisher, *Entomothera coromanda* (Linnaeus). By Harry C. Oberholser. Pp. 639-657. May 18, 1915.

2091. Rediscovery of Pourtales' *Haliotis*. By John B. Henderson. Pp. 659-661, 2 pls. May 22, 1915.

Volume 49

Proceedings of the United States National Museum, vol. 49. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); pp. 1-690 (Proceedings papers 2092-2130); pp. 691-702 (index); 296 figs., 83 pls. 1916.

2092. Descriptive catalogue of the Washington relics in the United States National Museum. By Theodore T. Belote. Pp. 1-24, 27 pls. Oct. 19, 1915.

2093. Notes on some United States grasshoppers of the family Acrididae. By A. N. Caudell. Pp. 25-31. June 21, 1915.

2094. The Recent and fossil mollusks of the genus *Rissoina* from the west coast of America. By Paul Bartsch. Pp. 33-62, 6 pls. July 24, 1915.

2095. A revision of the North American ichneumon-flies of the subfamily Opiinae. By A. B. Gahan. Pp. 63-95, 2 pls. Aug. 23, 1915.

2096. Descriptions of two new species of Entomostraca from Colorado, with notes on other species. By G. S. Dodds. Pp. 97-102, 10 figs. Aug. 13, 1915.

2097. Flies of the genus *Agromyza*, related to *Agromyza virens*. By J. R. Malloch. Pp. 103-108, 1 fig., 1 pl. July 24, 1915.

2098. Notes on the composition and structure of the Indarch, Russia, meteoric stone. By George P. Merrill. Pp. 109-112, 1 pl. July 24, 1915.

2099. The dipterous genus *Symphoromyia* in North America. By John Merton Aldrich. Pp. 113-142, 11 figs. July 16, 1915.

2100. The genera and subgenera of raccoons and their allies. By N. Hollister. Pp. 143-150, 2 pls. Aug. 13, 1915.

2101. Notes on the flies of the genus *Pseudodinia*, with description of a new species. By J. R. Malloch. Pp. 151-152. July 16, 1915.

2102. A peculiar oolite from Bethlehem, Pennsylvania. By Edgar T. Wherry. Pp. 153-156, 2 pls. Aug. 13, 1915.

2103. On a collection of Javanese crane-flies (Tipulidae, Diptera) in the United States National Museum. By Charles Paul Alexander. Pp. 157-193, 9 pls. Aug. 13, 1915.

2104. The Philippine land shells of the genus *Schistoloma*. By Paul Bartsch. Pp. 195-204, 1 pl. July 24, 1915.

2105. Descriptions of new species of Hymenoptera. By S. A. Rohwer. Pp. 205-249. July 16, 1915.

2106. Critical notes on the subspecies of the spotted owl, *Strix occidentalis* (Xantus). By Harry C. Oberholser. Pp. 251-257. July 26, 1915.

2107. Notes on the life history and ecology of the dragonflies (Odonata) of Washington and Oregon. By Clarence Hamilton Kennedy. Pp. 259-345, 201 figs. July 28, 1915.

2108. Report on some carbonic acid tests on the weathering of marbles and limestones. By George P. Merrill. Pp. 347-349. July 26, 1915.

2109. A collection of amphibians and reptiles from Gogebic County, Michigan. By Arthur T. Evans. Pp. 351-354. July 26, 1915.

2110. A new restoration of *Stegosaurus*. By Charles W. Gilmore. Pp. 355-357, 1 fig., 1 pl. Aug. 23, 1915.

2111. A colored drawing of the Medeba mosaic map of Palestine in the United States National Museum. By I. M. Casanowicz. Pp. 359-376, 1 pl. Aug. 23, 1915.

Proc. No.

2112. An albino salamander, *Spelerpes bilineatus*. By Arthur M. Banta and Ross Aiken Gortner. Pp. 377-379, 2 pls. Aug. 31, 1915.

2113. A contribution to the knowledge of the extinct sirenian *Desmostylus hesperus* Marsh. By Oliver P. Hay. Pp. 381-397, 3 pls. Aug. 31, 1915.

2114. *Eperetmus,* a new genus of Trachomedusae. By Henry B. Bigelow. Pp. 399-404, 1 pl. Aug. 31, 1915.

2115. New Neotropical muscoid flies. By Charles H. T. Townsend. Pp. 405-440. Nov. 27, 1915.

2116. A review of some bivalve shells of the group Anatinacea from the west coast of America. By William Healey Dall. Pp. 441-456. Nov. 27, 1915.

2117. A new crustacean, *Diaptomus virginiensis,* and a description of *Diaptomus tyrelli* Poppe. By C. Dwight Marsh. Pp. 457-462, 7 figs. Dec. 11, 1915.

2118. Notes on allophanite, fuchsite, and triphylite. By Edgar T. Wherry. Pp. 463-467. Nov. 27, 1915.

2119. British fossil insects. By T. D. A. Cockerell. Pp. 469-499, 6 pls. Dec. 11, 1915.

2120. On the fore limb of *Allosaurus fragilis.* By Charles W. Gilmore. Pp. 501-513, 7 figs. Nov. 27, 1915.

2121. A synopsis of the races of the crested tern, *Thalasseus bergii* (Lichtenstein). By Harry C. Oberholser. Pp. 515-526, 1 pl. Dec. 23, 1915.

2122. Three new species of *Anodontites* from Brazil. By William B. Marshall. Pp. 527-529, 3 pls. Dec. 11, 1915.

2123. An account of the Crustacea collected by the Walker Expedition to Santa Marta, Colombia. By A. S. Pearse. Pp. 531-556, 9 figs., 4 pls. Dec. 23, 1915.

2124. Notes on the species of the molluscan subgenus *Nucella* inhabiting the northwest coast of America and adjacent regions. By William Healey Dall. Pp. 557-572, 2 pls. Dec. 11, 1915.

2125. Notes on a collection of fishes made by Dr. Edgar A. Mearns from rivers tributary to the Gulf of California. By John Otterbein Snyder. Pp. 573-586, 1 fig., 2 pls. Dec. 23, 1915.

2126. New fresh-water shells from the Ozark Mountains. By Anson A. Hinkley. Pp. 587-589, 1 pl. Dec. 23, 1915.

2127. Osteology of *Thescelosaurus,* an orthopodous dinosaur from the Lance formation of Wyoming. By Charles W. Gilmore. Pp. 591-616, 20 figs., 4 pls. Dec. 23, 1915.

2128. Diagnoses of new genera of muscoid flies founded on old species. By Charles H. T. Townsend. Pp. 617-633. Jan. 14, 1916.

2129. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross,* 1907-1910.—No. 33.] The euphausiacean crustaceans of the *Albatross* expedition to the Philippines. By H. J. Hansen. Pp. 635-654, 1 pl. Jan. 14, 1916.

2130. The genera of the tettiginiid insects of the subfamily Rhaphidophorinae found in America north of Mexico. By A. N. Caudell. Pp. 655-690, 28 figs. Jan. 7, 1916.

Volume 50

Proceedings of the United States National Museum, vol. 50. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); pp. 1-652 (Proceedings papers 2131-2138); pp. 653-663 (index); 290 figs., 36 pls. 1916.

2131. Nematode parasites of mammals of the orders Rodentia, Lagomorpha, and Hyracoidea. By Maurice C. Hall. Pp. 1-258, 290 figs., 1 pl. May 13, 1916.

2132. A generic revision of the American moths of the subfamily Hypeninae, with descriptions of new genera and species. By William Schaus. Pp. 259-399. May 20, 1916.

2133. Fishes collected by the United States Bureau of Fisheries steamer *Albatross* during 1888, between Montevideo, Uruguay, and Tome, Chile, on the voyage through the Straits of Magellan. By Will F. Thompson. Pp. 401-476, 5 pls. May 20, 1916.

Proc. No.

2134. North American collembolous insects of the subfamilies Achorutinae, Neanurinae, and Podurinae. By Justus W. Folsom. Pp. 477-525, 19 pls. May 31, 1916.

2135. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 34.] New species of crabs of the families Inachidae and Parthenopidae. By Mary J. Rathbun. Pp. 527-559. May 31, 1916.

2136. Revision of the parasitic hymenopterous insects of the genus *Aphycus* Mayr, with notice of some related genera. By P. H. Timberlake. Pp. 561-640, 6 pls. May 31, 1916.

2137. Description of two new species of fossil turtles, from the Lance formation of Wyoming. By Charles W. Gilmore. Pp. 641-646, 4 pls. May 31, 1916.

2138. Description of three species of crabs *(Osachila)* from the eastern coast of North America. By Mary J. Rathbun. Pp. 647-652, 1 pl. May 31, 1916.

Volume 51

Proceedings of the United States National Museum, vol. 51. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); pp. 1-662 (Proceedings papers 2139-2172); pp. 663-676 (index); 25 figs., 121 pls. 1917.

2139. Descriptions of new Lepidoptera from Mexico. By Harrison G. Dyar. Pp. 1-37. Oct. 16, 1916.

2140. Descriptions of miscellaneous North American chalcidoid Hymenoptera of the family Eulophidae. By A. A. Girault. Pp. 39-52. Oct. 16, 1916.

2141. Some Diptera *(Microdon)* from nests of ants. By T. D. A. Cockerell and Hazel Andrews. Pp. 53-56, 2 figs. Oct. 16, 1916.

2142. On the geographical forms of the Philippine elegant titmouse, *Pardaliparus elegans* (Lesson), with descriptions of three new subspecies. By Edgar Alexander Mearns. Pp. 57-65. Oct. 16, 1916.

2143. Report on Arachnida collected by Messrs. Curie, Caudell, and Dyar in British Columbia. By Nathan Banks. Pp. 67-72. Oct. 16, 1916.

2144. New brachiopods of the genus *Spirifer* from the Silurian of Maine. By Henry Shaler Williams. Pp. 73-80, 1 pl. Dec. 16, 1916.

2145. Notes on alunite, psilomelanite, and titanite. By Edgar T. Wherry. Pp. 81-88. Oct. 16, 1916.

2146. Some American fossil insects. By T. D. A. Cockerell. Pp. 89-106, 9 figs., 1 pl. Oct. 16, 1916.

2147. Descriptions of two extinct mammals of the order Xenarthra from the Pleistocene of Texas. By Oliver P. Hay. Pp. 107-123, 5 pls. Oct. 28, 1916.

2148. New North American Hymenoptera of the family Eulophidae. By A. A. Girault. Pp. 125-133. Oct. 28, 1916.

2149. Report on the Japanese macrouroid fishes collected by the United States Fisheries steamer *Albatross* in 1906, with a synopsis of the genera. By Charles Henry Gilbert and Carl L. Hubbs. Pp. 135-214, 4 pls. Oct. 28, 1916.

2150. New and little-known heteropterous Hemiptera in the United States National Museum. By E. Bergroth. Pp. 215-239. Oct. 28, 1916.

2151. A review of the fossil plants in the United States National Museum from the Florissant lake beds at Florissant, Colorado, with descriptions of new species and list of type-specimens. By F. H. Knowlton. Pp. 241-297, 16 pls. Nov. 24, 1916.

2152. New genera and species of muscoid flies. By Charles H. T. Townsend. Pp. 299-323. Oct. 28, 1916.

2153. A recently-found iron meteorite from Cookeville, Putnam County, Tennessee. By George P. Merrill. Pp. 325-326, 1 pl. Nov. 24, 1916.

2154. Two new fossil plants from the Triassic of Pennsylvania. By Edgar T. Wherry. Pp. 327-329, 2 pls. Nov. 24, 1916.

2155. Two new land shells from the western States. By Paul Bartsch. Pp. 331-333, 1 pl. Nov. 24, 1916.

Proc. No.

2156. A contribution to our knowledge of the white flies of the subfamily Aleyrodinae (Aleyrodidae). By A. L. Quaintance and A. C. Baker. Pp. 335-445, 10 figs., 46 pls. Jan. 20, 1917.

2157. Notes on the Whitfield County, Georgia, meteoric irons, with new analyses. By George P. Merrill. Pp. 447-449, 1 pl. Dec. 16, 1916.

2158. A Lower Jurassic flora from the upper Matanuska Valley, Alaska. By F. H. Knowlton. Pp. 451-460, 4 pls. Dec. 16, 1916.

2159. Studies of weevils (Rhynchophora) with descriptions of new genera and species. By W. Dwight Pierce. Pp. 461-473, 2 figs. Dec. 16, 1916.

2160. A new mollusk of the genus *Pisidium* from Alaska, with field notes by G. Dallas Hanna. By Victor Sterki. Pp. 475-477, 2 figs. Dec. 16, 1916.

2161. New Javanese chalcidoid Hymenoptera. By A. A. Girault. Pp. 479-485. Dec. 16, 1916.

2162. A contribution to the invertebrate fauna of the Oligocene beds of Flint River, Georgia. By William Healey Dall. Pp. 487-524, 6 pls. Dec. 21, 1916.

2163. A newly found meteoric stone from Lake Okechobee, Florida. By George P. Merrill. Pp. 525-526. Dec. 21, 1916.

2164. A revision of the rotatorian genera *Lepadella* and *Lophocharis* with descriptions of five new species. By Harry K. Harring. Pp. 527-568, 9 pls. Dec. 21, 1916.

2165. A new genus and three new species of parasitic isopod crustaceans. By W. P. Hay. Pp. 569-574, 3 pls. Jan. 15, 1917.

2166. Summary of the mollusks of the family Alectrionidae of the west coast of America. By William Healey Dall. Pp. 575-579. Jan. 15, 1917.

2167. Descriptions of seven new species of red spiders. By E. A. McGregor. Pp. 581-590, 7 pls. Jan. 15, 1917.

2168. Paraphernalia of a Korean sorceress in United States National Museum. By I. M. Casanowicz. Pp. 591-597, 5 pls. Dec. 21, 1916.

2169. Mollusks from the type locality of the Choctawhatchee marl. By Wendell C. Mansfield. Pp. 599-607, 1 pl. Dec. 21, 1916.

2170. The Californian land shells of the *Epiphragmophora traskii* group. By Paul Bartsch. Pp. 609-619, 4 pls. Dec. 21, 1916.

2171. A generic synopsis of the coccinellid larvae in the United States National Museum, with a description of the larva of *Hyperaspis binotata* Say. By Adam Böving. Pp. 621-650, 4 pls. Jan. 15, 1917.

2172. [Scientific results of the Philippine cruise of the Fisheries steamer *Albatross*, 1907-1910.—No. 35.] New species and varieties of Forminifera from the Philippines and adjacent waters. By Joseph A. Cushman. Pp. 651-662. Jan. 15, 1917.

Volume 52

Proceedings of the United States National Museum, vol. 52. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); pp. 1-693 (Proceedings papers 2173-2193); pp. 683-693 (index); 652 figs., 47 pls. 1917.

2173. A revision of the bembicine wasps of America north of Mexico. By John Bernard Parker. Pp. 1-155, 230 figs. Feb. 10, 1917.

2174. North American earthworms of the family Lumbricidae in the collections of the United States National Museum. By Frank Smith. Pp. 157-182. Feb. 8, 1917.

2175. The birds of Bawean Island, Java Sea. By Harry C. Oberholser. Pp. 183-198. Feb. 8, 1917.

2176. Field notes on Virginia Orthoptera. By Henry Fox. Pp. 199-234. Mar. 16, 1917.

2177. Fossil fishes in the collection of the United States National Museum. By Charles R. Eastman. Pp. 235-304, 9 figs., 23 pls. Feb. 24, 1917.

2178. Monograph of the Nearctic Hymenoptera of the genus *Bracon* Fabricius. By Harold Morrison. Pp. 305-343, 4 pls. Mar. 7, 1917.

Proc. No.

2179. The variation exhibited by *Thamnophis ordinoides* (Baird and Girard), a garter snake inhabiting the San Francisco Peninsula. By Joseph C. Thompson. Pp. 345-366. Mar. 7, 1917.

2180. *Trophodiscus,* a new sea star from Kamchatka. By Walter K. Fisher. Pp. 367-371, 3 pls. Mar. 7, 1917.

2181. New Tertiary insects. By T. D. A. Cockerell. Pp. 373-384, 1 pl. Feb. 23, 1917.

2182. New species of South Dakota Cretaceous crabs. By Mary J. Rathbun. Pp. 385-391, 2 pls. Feb. 23, 1917.

2183. Diagnoses of new species of marine bivalve mollusks from the northwest coast of America in the collection of the United States National Museum. By William Healey Dall. Pp. 393-417. Dec. 27, 1916.

2184. A new find of meteoric stones near Plainview, Hale County, Texas. By George P. Merrill. Pp. 419-422, 2 pls. Mar. 7, 1917.

2185. Description of a new goby, *Garmannia spongicola,* from North Carolina. By Lewis Radcliffe. Pp. 423-425, 1 fig. Feb. 8, 1917.

2186. A new species of polychaetous annelid from Panama, with notes on an Hawaiian form. By Aaron L. Treadwell. Pp. 427-430, 5 figs. Feb. 8, 1917.

2187. Notice of a new Paleocene mammal, a possible relative of the titanotheres. By James Williams Gidley. Pp. 431-435, 1 fig., 1 pl. Feb. 23, 1917.

2188. Mammals collected by Dr. W. L. Abbott on the chain of islands lying off the western coast of Sumatra, with descriptions of twenty-eight new species and subspecies. By Marcus Ward Lyon, Jr. Pp. 437-462. Dec. 30, 1916.

2189. New species of fossil beetles from Florissant, Colorado. By H. F. Wickham. Pp. 463-472, 3 pls. Feb. 23, 1917.

2190. Rotatoria of Los Angeles, California, and vicinity, with descriptions of a new species. By Frank J. Myers. Pp. 473-478, 2 pls. Feb. 23, 1917.

2191. On certain secondary sexual characters in the male ruddy duck, *Erismatura jamaicensis* (Gmelin). By Alexander Wetmore. Pp. 479-482, 1 fig. Feb. 8, 1917.

2192. Notes on the life history and ecology of the dragonflies (Odonata) of central California and Nevada. By Clarence Hamilton Kennedy. Pp. 483-635, 404 figs. May 12, 1917.

2193. Descriptions of new west American marine mollusks and notes on previously described forms. By Paul Bartsch. Pp. 637-681, 6 pls. May 29, 1917.

Volume 53

Proceedings of the United States National Museum, vol. 53. Pp. i-xi (title page, advertisement, table of contents, and list of illustrations); Pp. 1-659 (Proceedings papers 2194-2222); pp. 661-669 (index); 154 figs., 79 pls. 1917.

2194. North American parasitic copepods belonging to the Lernaeidae with a revision of the entire family. By Charles Branch Wilson. Pp. 1-150, 4 figs., 21 pls. June 13, 1917.

2195. Descriptions of thirty-one new species of Hymenoptera. By S. A. Rohwer. Pp. 151-176, 1 fig. June 5, 1917.

2196. Some effects of environment and habit on captive lions. By N. Hollister. Pp. 177-193, 2 figs., 4 pls. June 1, 1917.

2197. Descriptions of some new parasitic Hymenoptera. By A. B. Gahan. Pp. 195-217. May 26, 1917.

2198. Description of a new species of mastodon, *Gomphotherium elegans,* from the Pleistocene of Kansas. By Oliver P. Hay. Pp. 219-221, 1 pl. June 1, 1917.

2199. *Gomphus parvidens,* a new species of dragonfly from Maryland. By Bertha P. Currie. Pp. 223-226, 2 pls. June 1, 1917.

2200. A remarkable occurrence of calcite in silicified wood. By Edgar T. Wherry. Pp. 227-230, 3 pls. June 1, 1917.

2201. An asymmetrical bird-louse found on three different species of troupials. By John Howard Paine. Pp. 231-232, 1 pl. June 1, 1917.

Proc. No.

2202. A report on a collection of Hymenoptera (mostly from California) made by W. M. Giffard. By S. A. Rohwer. Pp. 233-249. May 28, 1917.

2203. A new species of bear-animalcule from the coast of North Carolina. By W. P. Hay. Pp. 251-254, 1 pl. June 1, 1917.

2204. A new American parasite of the Hessian fly *(Mayetiola destructor* Say). By P. R. Myers. Pp. 255-257. May 28, 1917.

2205. Cuban amphibians and reptiles collected for the United States National Museum from 1899 to 1902. By Leonhard Stejneger. Pp. 259-291, 128 figs. May 31, 1917.

2206. An American species of the hymenopterous genus *Wesmaelia* of Foerster. By P. R. Myers. Pp. 293-294. May 24, 1917.

2207. A monograph of West American melanellid mollusks. By Paul Bartsch. Pp. 295-356, 16 pls. Aug. 13, 1917.

2208. The type-species of the genera of the Cynipoidea, or the gall wasps and parasitic cynipoids. By S. A. Rohwer and Margaret M. Fagan. Pp. 357-380. June 6, 1917.

2209. New and little-known species of South American fresh-water mussels of the genus *Diplodon.* By William B. Marshall. Pp. 381-388, 6 pls. Aug. 15, 1917.

2210. Some fossil insects from Florissant, Colorado. By T. D. A. Cockerell. Pp. 389-392. June 2, 1917.

2211. The salamanders of the genera *Desmognathus* and *Leurognathus.* By Emmett R. Dunn. Pp. 393-433, 15 figs. June 4, 1917.

2212. Description of a new species of extinct horse, *Equus lambei,* from the Pleistocene of Yukon Territory. By Oliver P. Hay. Pp. 435-443, 3 pls. June 5, 1917.

2213. Notes and descriptions of miscellaneous chalcid-flies (Hymenoptera). By A. A. Girault. Pp. 445-450. Aug. 10, 1917.

2214. Description of a new species of crab from the California Pliocene. By Mary J. Rathbun. Pp. 451-452, 1 pl. Aug. 15, 1917.

2215. Fossil remains of what appears to be a passerine bird from the Florissant shales of Colorado. By R. W. Shufeldt. Pp. 453-455, 2 pls. Aug. 15, 1917.

2216. Eight new species of reared ichneumon-flies with notes on some other species. By R. A. Cushman. Pp. 457-469. Aug. 9, 1917.

2217. Notes on the shells of the genus *Epitonium* and its allies of the Pacific coast of America. By William Healey Dall. Pp. 471-488. Aug. 10, 1917.

2218. Fossil Echini of the Panama Canal Zone and Costa Rica. By Robert Tracy Jackson. Pp. 489-501, 4 figs., 7 pls. Sept. 24, 1917.

2219. A revision of hymenopterous insects of the tribe Cremastini of American north of Mexico. By R. A. Cushman. Pp. 503-551. Aug. 22, 1917.

2220. The color of amethyst, rose, and blue varieties of quartz. By Thomas L. Watson and R. E. Beard. Pp. 553-563. Aug. 11, 1917.

2221. Generic names applied to birds during the years 1906 to 1915, inclusive, with additions and corrections to Waterhouse's "Index Generum Avium." By Charles W. Richmond. Pp. 565-636. Aug. 16, 1917.

2222. North American collembolous insects of the subfamily Onychiurinae. By Justus W. Folsom. Pp. 637-659, 12 pls. Aug. 22, 1917.

Volume 54

Proceedings of the United States National Museum, vol. 54. Pp. i-xv (title page, advertisement, table of contents, and list of illustrations); pp. 1-640 (Proceedings papers 2223-2257) pp. 641-653 (index); 95 figs., 96 pls. 1919.

2223. Chitons taken by the United States Fisheries steamer *Albatross* in the northwest Pacific in 1906. By S. Stillman Berry. Pp. 1-18, 1 fig., 10 pls. Dec. 5, 1917.

2224. Notes on Hawaiian lizards. By John Otterbein Snyder. Pp. 19-25. Oct. 7, 1917.

2225. Nuculites from the Silurian formations of Washington County, Maine. By Henry Shaler Williams. Pp. 27-58, 1 fig., 2 pls. Oct. 20, 1917.

2226. Altitudinal distribution of Entomostraca in Colorado. By Gideon S. Dodds. Pp. 59-87, 9 figs., 2 pls. Oct. 27, 1917.

Proc. No.

2227. New flies of the genus *Sarcophaga* from Guam and the Philippines. By R. R. Parker. Pp. 89-97, 5 figs. Oct. 17, 1917.

2228. On two species of fishes from the Yalu River, China. By Isaac Ginsburg. Pp. 99-101. Oct. 18, 1917.

2229. Fossil plants from Bolivia and their bearing upon the age of uplift of the eastern Andes. By Edward W. Berry. Pp. 103-164, 2 figs., 4 pls. Oct. 27, 1917.

2230. A review of the subspecies of the Leach petrel, *Oceanodroma leucorhoa* (Vieillot). By Harry C. Oberholser. Pp. 165-172. Oct. 19, 1917.

2231. Description of *Hymenocephalus tenuis,* a new macruroid fish from the Hawaiian Islands. By Charles H. Gilbert and Carl L. Hubbs. Pp. 173-175. Dec. 14, 1917.

2232. Birds collected by Dr. W. L. Abbott on various islands in the Java Sea. By Harry C. Oberholser. Pp. 177-200. Nov. 2, 1917.

2233. An account of some fishes from Owens River, California. By John Otterbein Snyder. Pp. 201-205. Dec. 13, 1917.

2234. Notes on *Chrysodomus* and other mollusks from the north Pacific Ocean. By William Healey Dall. Pp. 207-234. Apr. 5, 1918.

2235. The Hopi Indian collection in the United States National Museum. By Walter Hough. Pp. 235-296, 48 figs., 35 pls. Apr. 6, 1918.

2236. The fishes of Mohave River, California. By John Otterbein Snyder. Pp. 297-299, 1 fig. Mar. 5, 1918.

2237. New species of North American fossil beetles, cockroaches, and tsetse flies. By T. D. A. Cockerell. Pp. 301-311, 5 figs., 2 pls. July 5, 1918.

2238. Notes on the nomenclature of the mollusks of the family Turritidae. By William Healey Dall. Pp. 313-333. Apr. 5, 1918.

2239. Descriptions of new Lepidoptera from Mexico. By Harrison G. Dyar. Pp. 335-372. Apr. 5, 1918.

2240. Notes on mimetite, thaumasite, and wavellite. By Edgar T. Wherry. Pp. 373-381, 1 pl. Dec. 23, 1918.

2241. A newly mounted skeleton of the armored dinosaur, *Stegosaurus stenops,* in the United States National Museum. By Charles W. Gilmore. Pp. 383-390, 7 pls. Dec. 26, 1918.

2242. The comparative morphology of the order Strepsiptera together with records and descriptions of insects. By W. Dwight Pierce. Pp. 391-501, 5 figs., 1 map, 15 pls. Sept. 12, 1918.

2243. Further notes on the Plainview, Texas, meteorite. By George P. Merrill. Pp. 503-505, 2 pls. Oct. 7, 1918.

2244. Mammals and reptiles collected by Theodoor de Booy in the Virgin Islands. By Gerrit S. Miller, Jr. Pp. 507-511, 1 pl. Oct. 15, 1918.

2245. Bones of birds collected by Theodoor de Booy from kitchen midden deposits in the islands of St. Thomas and St. Croix. By Alexander Wetmore. Pp. 513-522, 1 pl. Nov. 21, 1918.

2246. Two new land shells of the *Epiphragmophora traskii* group. By Paul Bartsch. Pp. 523-524, 1 pl. Dec. 23, 1918.

2247. Report on the calcareous sponges collected during 1906 by the United States Fisheries steamer *Albatross* in the northwestern Pacific. By Sanji Hōzawa. Pp. 525-556, 11 figs., 2 pls. Oct. 16, 1918.

2248. On the Fayette County, Texas, meteorite finds of 1878 and 1900 and the probability of their representing two distinct falls. By George P. Merrill. Pp. 557-561, 1 fig., 1 map, 2 pls. Nov. 25, 1918.

2249. Descriptions and notes on some ichneumon-flies from Java. By S. A. Rohwer. Pp. 563-570. Nov. 25, 1918.

2250. New marine shells from Panama. By Paul Bartsch. Pp. 571-575, 1 pl. Dec. 23, 1918.

2251. On the anatomy of *Nyctibius* with notes on allied birds. By Alexander Wetmore. Pp. 577-586, 7 figs. Oct. 15, 1918.

Proc. No.

2252. Four new African parasitic Hymenoptera belonging to the subfamily Microgasterinae. By A. B. Gahan. Pp. 587-590. Nov. 15, 1918.

2253. Descriptions of ten new isopods. By Pearl L. Boone. Pp. 591-604, 4 pls. Oct. 16, 1918.

2254. A new West Indian fossil land shell. By Paul Bartsch. Pp. 605-606, 1 pl. Dec. 26, 1918.

2255. Annotated catalogue of a collection of birds made by Mr. Copley Amory, Jr., in northeastern Siberia. By J. H. Riley. Pp. 607-626. Oct. 28, 1918.

2256. Fossil plants from the late Tertiary of Oklahoma. By Edward W. Berry. Pp. 627-636, 2 pls. Nov. 19, 1918.

2257. A new genus and species of multibrachiate ophiuran of the family Gorgonocephalidae from the Caribbean Sea. By Austin H. Clark. Pp. 637-640, 1 pl. Nov. 1, 1918.

Volume 55

Proceedings of the United States National Museum, vol. 55. Pp. i-vi (title page, advertisement, table of contents, and list of illustrations); pp. 1-649 (Proceedings papers 2258-2287); pp. 651-660 (index); 183 figs., 97 pls. 1920.

2258. The adult taenioid cestodes of dogs and cats, and of related carnivores in North America. By Maurice C. Hall. Pp. 1-94, 80 figs. Apr. 11, 1919.

2259. A heretofore undescribed meteoric stone from Kansas City, Missouri. By George P. Merrill. Pp. 95-96, 2 pls. Apr. 12, 1919.

2260. A new restoration of *Triceratops,* with notes on the osteology of the genus. By Charles W. Gilmore. Pp. 97-112, 6 figs., 7 pls. Apr. 9, 1919.

2261. New reared parasitic Hymenoptera with some notes on synonymy. By A. B. Gahan. Pp. 113-128, 2 figs. Apr. 26, 1919.

2262. The birds of the Tambelan Islands, South China Sea. By Harry C. Oberholser. Pp. 129-143. Apr. 26, 1919.

2263. Descriptions of new African earthworms, including a new genus of Moniligastridae. By Frank Smith and Bessie R. Green. Pp. 145-166, 18 figs. May 19, 1919.

2264. Bees in the collection of the United States National Museum.—3. By T. D. A. Cockerell. Pp. 167-221. May 7, 1919.

2265. Notes on the wrens of the genus *Nannus* Billberg. By Harry C. Oberholser. Pp. 223-236. Apr. 28, 1919.

2266. Additions and corrections to "The Type-species of the Genera of the Cynipoidea or the Gall Wasps and Parasitic Cynipoids." By S. A. Rohwer and Margaret M. Fagan. Pp. 237-240. Apr. 26, 1919.

2267. The branchiobdellid worms in the collections of the United States National Museum, with descriptions of new genera and new species. By Max M. Ellis. Pp. 241-265, 19 figs., 4 pls. May 2, 1919.

2268. Notes on birds collected by Dr. W. L. Abbott on Pulo Taya, Berhala Strait, southeastern Sumatra. By Harry C. Oberholser. Pp. 267-274. Apr. 28, 1919.

2269. Hemiptera collected by the Yale-Dominican Expedition of 1913. By Edmund H. Gibson. Pp. 275-277. Apr. 26, 1919.

2270. Miocene fossil plants from northern Peru. By Edward W. Berry. Pp. 279-294, 4 pls. Apr. 28, 1919.

2271. Five new species of ptinid beetles. By W. S. Fisher. Pp. 295-299. Apr. 26, 1919.

2272. New land shells from the Philippine Islands. By Paul Bartsch. Pp. 301-307, 3 pls. Apr. 28, 1919.

2273. On certain genera of atherine fishes. By David Starr Jordan. Pp. 309-311, 2 figs. Apr. 26, 1919.

2274. A new species of parasitic copepod, with notes on species already described. By Charles Branch Wilson. Pp. 313-316, 1 pl. May 2, 1919.

2275. Distribution and use of slings in pre-Columbian America, with descriptive catalogue of ancient Peruvian slings in the United States National Museum. By Philip Ainsworth Means. Pp. 317-349, 3 figs., 6 pls. May 7, 1919.

Proc. No.

2276. A revision of the subspecies of the white-collared kingfisher, *Sauropatis chloris* (Boddaert). By Harry C. Oberholser. Pp. 351-395. May 2, 1919.

2277. On a rare species of half-beak, *Hemiramphus balao,* from Cuba. By David Starr Jordan. Pp. 397-398, 1 fig. May 2, 1919.

2278. The races of the Nicobar megapode, *Megapodius nicobariensis* Blyth. By Harry C. Oberholser. Pp. 399-402. May 7, 1919.

2279. Notes on some genera and species of chalcid-flies belonging to the Aphelininae with description of a new species. By A. B. Gahan. Pp. 403-407, 5 figs. May 22, 1919.

2280. Exploration of a pit house village at Luna, New Mexico. By Walter Hough. Pp. 409-431, 44 figs., 11 pls. June 14, 1919.

2281. A revision of the chalcid-flies of the genus *Harmolita* of America north of Mexico. By W. J. Phillips and W. T. Emery. Pp. 433-471, 10 pls. Aug. 6, 1919.

2282. Notes on Dr. W. L. Abbott's second collection of birds from Simalur Island, western Sumatra. By Harry C. Oberholser. Pp. 473-498, 1 fig. June 5, 1919.

2283. Descriptions of new species of chitons from the Pacific coast of America. By William Healey Dall. Pp. 499-516. June 7, 1919.

2284. Descriptions of new North American ichneumon-flies. By R. A. Cushman. Pp. 517-543, 1 fig. June 7, 1919.

2285. Report on a collection of Copepoda made in Honduras by F. J. Dyer. By C. Dwight Marsh. Pp. 545-548, 1 pl. June 5, 1919.

2286. North American parasitic copepods belonging to the new family Sphyriidae. By Charles Branch Wilson. Pp. 549-604, 10 pls. June 18, 1919.

2287. Descriptive catalogue of the collection of ecclesiastical art in the United States National Museum. By I. M. Casanowicz. Pp. 605-649, 38 pls. June 18, 1919.

Volume 56

Proceedings of the United States National Museum, vol. 56. Pp. i-xi (title page, advertisement, table of contents, and list of illustrations); pp. 1-679 (Proceedings papers 2288-2303); pp. 681-692 (index); 43 figs., 81 pls. 1920.

2288. Descriptions of new species of mollusks of the family Turritidae from the west coast of America and adjacent regions. By William Healey Dall. Pp. 1-86, 24 pls. Aug. 8. 1919.

2289. A review of the leafhoppers of the genus *Gypona* north of Mexico. By Edmund H. Gibson. Pp. 87-100, Aug. 6, 1919.

2290. A new foraminifer commensal on *Cyclammina.* By Joseph A. Cushman. Pp. 101-102, 1 pl. July 31, 1919.

2291. Descriptions of some mammalian and fish remains from Florida of probably Pleistocene age. By Oliver P. Hay. Pp. 103-112, 3 pls. July 31, 1919.

2292. New fossil turtles, with notes on two described species. By Charles W. Gilmore. Pp. 113-132, 8 figs., 9 pls. July 30, 1919.

2293. Revision of the parasitic chalcidoid flies of the genera *Homalotylus* Mayr and *Isodromus* Howard, with descriptions of two closely related genera. By P. H. Timberlake. Pp. 133-194, 4 pls. Aug. 29, 1919.

2294. The fishes of the United States Eclipse Expedition to West Africa. By Henry W. Fowler. Pp. 195-292, 13 figs. Aug. 8, 1919.

2295. Descriptions of new species of Mollusca from the North Pacific Ocean in the collection of the United States National Museum. By William Healey Dall. Pp. 293-371. Aug. 30, 1919.

2296. Notes on certain genera of ichneumon-flies with descriptions of a new genus and four new species. By R. A. Cushman. Pp. 373-382, 2 figs. Aug. 27, 1919.

2297. A study of the brachiopod genus *Platystrophia.* By Eula Davis McEwan. Pp. 383-448, 11 pls. Sept. 2, 1919.

2298. Habits and economic relations of the guano birds of Peru. By Robert E. Coker. Pp. 449-511, 1 fig., 17 pls. Sept. 11, 1919.

Proc. No.

2299. Report on a small collection of Indian parasitic Hymenoptera. By A. B. Gahan. Pp. 513-524. Oct. 20, 1919.

2300. A mounted skeleton of *Dimetrodon gigas* in the United States National Museum, with notes on the skeletal anatomy. By Charles W. Gilmore. Pp. 525-539, 8 figs., 4 pls. Dec. 15, 1919.

2301. New genera and species of muscoid flies. By Charles H. T. Townsend. Pp. 541-592. Dec. 15, 1919.

2302. Recent Foraminifera from off New Zealand. By Joseph C. Cushman. Pp. 593-640, 2 pls. Dec. 16, 1919.

2303. The red spiders of America and a few European species likely to be introduced. By E. A. McGregor. Pp. 641-679, 11 figs., 6 pls. Jan. 8, 1920.

Volume 57

Proceedings of the United States National Museum, vol. 57. Pp. i-x (title page, advertisement, table of contents, and list of illustrations); pp. 1-678 (Proceedings papers 2304-2324); pp. 679-689 (index); 99 figs., 55 pls. 1921.

2304. On some hitherto unrecognized reptilian characters in the skull of the Insectivora and other mammals. By Jacob L. Wortman. Pp. 1-52, 16 figs. Apr. 5, 1920.

2305. On some forest Lepidoptera with descriptions of new species, larvae, and pupae. By Carl Heinrich. Pp. 53-96, 13 pls. June 17, 1920.

2306. The Cumberland Falls, Whitley County, Kentucky, meteorite. By George P. Merrill. Pp. 97-105, 1 fig., 5 pls. June 15, 1920.

2307. New species of Lepidoptera in the United States National Museum. By William Schaus. Ppp. 107-152. June 15, 1920.

2308. Observation on living specimens of *Iridia diaphana,* a species of Foraminifera. By Joseph Augustine Cushman. Pp. 153-158, 3 pls. June 16, 1920.

2309. Three new species of Indian drynnid parasites of rice leaf-hoppers. By S. A. Rohwer. Pp. 159-161, 1 pl. June 16, 1920.

2310. Report on cephalopods collected during 1906 by the United States Bureau of Fisheries steamer *Albatross* in the northwestern Pacific. By Madoka Sasaki. Pp. 163-203, 4 pls. Sept. 3, 1920.

2311. American records of whales of the genus *Pseudorca.* By Gerrit S. Miller, Jr. Pp. 205-207, 5 pls. June 15, 1920.

2312. Descriptions of twenty-five new species of North American Hymenoptera. By S. A. Rohwer. Pp. 209-231. June 16, 1920.

2313. Eocene insects from the Rocky Mountains. By T. D. A. Cockerell. Pp. 233-260, 11 figs., 5 pls. June 15, 1920.

2314. Annotated list of the Recent Brachiopoda in the collection of the United States National Museum, with descriptions of thirty-three new forms. By William Healey Dall. Pp. 261-377. June 24, 1920.

2315. Holarctic tribes of the ichneumon-flies of the subfamily Ichneumoninae (Pimplinae). By R. A. Cushman and S. A. Rohwer. Pp. 379-396, 14 figs. June 18, 1920.

2316. Diabantite, stilpnomelane, and chalcodite of the trap quarries of Westfield, Massachusetts. By Earl V. Shannon. Pp. 397-403. June 15, 1920.

2317. The North American ichneumon-flies of the tribes Labenini, Rhyssini, Xoridini, Odontomerini, and Phytodietini. By S. A. Rohwer. Pp. 405-474, 13 figs. June 19, 1920.

2318. Petrography of some lamprophyric dike rocks of the Coeur d'Alene mining district, Idaho. By Earl V. Shannon. Pp. 475-495, 4 figs., 3 pls. Sept. 2, 1920.

2319. A new Chinese isopod, *Ichthyoxenus geei.* By Pearl L. Boone. Pp. 497-502, 2 pls. July 27, 1920.

2320. The North American ichneumon-flies of the tribe Acoenitini. By R. A. Cushman and S. A. Rohwer. Pp. 503-523, 3 figs. June 21, 1920.

2321. A new fresh-water mollusk from Indiana. By Bryant Walker. P. 525, 1 fig. Sept. 9, 1920.

Proc. No.

2322. Synopsis of the trematode family Heterophyidae with descriptions of a new genus and five new species. By Brayton Howard Ransom. Pp. 527-573, 33 figs. June 16, 1920.

2323. Larvae of North American beetles of the family Cleridae. By Adam G. Böving and A. B. Champlain. Pp. 575-649, 12 pls. Aug. 31, 1920.

2324. Pleistocene peccaries from the Cumberland Cave deposit. By James Williams Gidley. Pp. 651-678, 13 figs., 2 pls. June 18, 1920.

Volume 58

Proceedings of the United States National Museum, vol. 58. Pp. i-viii, title page, advertisement, table of contents, and list of illustrations); pp. 1-680 (Proceedings papers 2325-2353); pp. 681-692 (index); 32 figs., 35 pls. 1921.

2325. Notes on a collection of shells from Trinidad, California. By Eric Knight Jordan. Pp. 1-5, 1 pl. Sept. 8, 1920.

2326. The North American ichneumon-flies of the tribes Lycorini, Polysphinctini, and Theroniini. By R. A. Cushman. Pp. 7-48, 5 figs., 1 pl. Sept. 3, 1920.

2327. A classification of the American operculate land mollusks of the family Annulariidae. By John B. Henderson and Paul Bartsch. Pp. 49-82. July 8, 1920.

2328. Descriptions of some Pleistocene vertebrates found in the United States. By Oliver P. Hay. Pp. 83-146, 4 figs., 9 pls. Oct. 12, 1920.

2329. The chemical composition of hydrotalcite and the hydrotalcite group of minerals. By William F. Foshag. Pp. 147-153. Sept. 9, 1920.

2330. The dipterous genus *Zygothrica* of Wiedemann. By A. H. Sturtevant. Pp. 155-158, 1 fig. Sept. 9, 1920.

2331. The west American mollusks of the families Rissoellidae and Synceratidae, and the rissoid genus *Barleeia*. By Paul Bartsch. Pp. 159-176, 2 pls. Nov. 9, 1920.

2332. New serphidoid, cynipoid, and chalcidoid Hymenoptera. By A. A. Girault. Pp. 177-216. Sept. 9, 1920.

2333. Report on the Mammalia collected by Mr. Edmund Heller during the Peruvian Expedition of 1915 under the auspices of Yale University and the National Geographic Society. By Oldfield Thomas. Pp. 217-249, 2 pls. Nov. 10, 1920.

2334. North American ichneumon-flies, new and described, with taxonomic and nomenclatorial notes. By R. A. Cushman. Pp. 251-292, 1 fig. Nov. 8, 1920.

2335. Preliminary diagnoses of new cephalopods from the western Atlantic. By S. Stillman Berry. Pp. 293-300, 1 pl. Nov. 10, 1920.

2336. New fresh-water shells from Guatemala. By William B. Marshall. Pp. 301-302, 1 pl. Nov. 13, 1920.

2337. Some recent accessions to the mineral collections of the United States National Museum. By William F. Foshag. Pp. 303-305, 3 pls. Nov. 13, 1920.

2338. A small collection of fishes from Soochow, China, with descriptions of two new species. By Henry W. Fowler. Pp. 307-321, 2 figs. Nov. 3, 1920.

2339. Recent accessions in the Division of Applied Geology. By Earl V. Shannon. Pp. 323-326. Nov. 10, 1920.

2340. The North American ichneumon-flies of the tribe Ephialtini. By R. A. Cushman. Pp. 327-362, 1 fig., 1 pl. Nov. 10, 1920.

2341. Notes on the meteorite of Estherville, Iowa, with especial reference to its included "peckhamite" and probable metamorphic nature. By George P. Merrill. Pp. 363-370, 3 pls. Nov. 11, 1920.

2342. Analyses and optical properties of amesite and corundophilite from Chester, Massachusetts, and of chromium-bearing chlorites from California and Wyoming. By Earl V. Shannon. Pp. 371-379. Nov. 10, 1920.

2343. Additions to West Indian Tertiary decapod crustaceans. By Mary J. Rathbun. Pp. 381-384, 1 pl. Nov. 11, 1920.

2344. Diptera of the superfamily Tipuloidea found in the District of Columbia. By C. P. Alexander and W. L. McAtee. Pp. 385-435, 1 pl. Dec. 7, 1920.

Proc. No.

2345. Notes on anglesite, anthophyllite, calcite, datolite, sillimanite, stilpnomelane, tetrahedrite and triplite. By Earl V. Shannon. Pp. 437-453, 13 figs. Dec. 18, 1920.

2346. Two new genera and species of acanthocephalous worms from Venezuelan fishes. By H. J. Van Cleave. Pp. 455-466, 2 pls. Dec. 21, 1920.

2347. A new polychaetous annelid of the genus *Nereis* from Brazil. By Aaron L. Treadwell. Pp. 467-468, 4 figs. Nov. 8, 1920.

2348. Some minerals from the old tungsten mine at Long Hill in Trumbull, Connecticut. By Earl V. Shannon. Pp. 469-482, 1 fig. Nov. 9, 1920.

2349. A revision of the North American species of ichneumon-flies belonging to the genus *Apanteles*. By C. F. W. Muesebeck. Pp. 483-576. Jan. 4, 1921.

2350. Observations on the nematode genus *Nematodirus*, with descriptions of new species. By Henry G. May. Pp. 577-588, 7 pls. Nov. 30, 1920.

2351. Boulangerite, bismutoplagionite, naumannite and a silver-bearing variety of jamesonite. By Earl V. Shannon. Pp. 589-607. Nov. 3, 1920.

2352. Amphibians and reptiles from southern Peru collected by the Peruvian Expedition of 1914-1915 under the auspices of Yale University and the National Geographic Society. By Thomas Barbour and G. K. Noble. Pp. 609-620. Jan. 6, 1921.

2353. Genotypes of the elaterid bettles of the world. By J. A. Hyslop. Pp. 621-680. Apr. 9, 1921.

Volume 59

Proceedings of the United States National Museum, vol. 59. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); pp. 1-676 (Proceedings papers 2354-2395); pp. 677-685 (index); 97 figs., 125 pls. 1922.

2354. New species and a new genus of parasitic copepods. By Charles Branch Wilson. Pp. 1-17, 7 pls. June 10, 1921.

2355. Some fossil fish scales from Peru. By T. D. A. Cockerell. Pp. 19-20, 7 figs. June 10, 1921.

2356. A palm nut from the Miocene of the Canal Zone. By Edward W. Berry. Pp. 21-22, 3 figs. June 10, 1921.

2357. Notes on some western fluvial fishes described by Charles Girard in 1856. By John Otterbein Snyder. Pp. 23-28. June 16, 1921.

2358. Some Eocene insects from Colorado and Wyoming. By T. D. A. Cockerell. Pp. 29-39, 9 figs., 1 pl. June 27, 1921.

2359. The fossil annelid genus *Hamulus* Morton, an operculate Serpula. By Bruce Wade. Pp. 41-46, 2 pls. June 10, 1921.

2360. Foraminifera from the north coast of Jamaica. By Joseph A. Cushman. Pp. 47-82, 16 figs., 9 pls. June 10, 1921.

2361. Notes on sawflies, with descriptions of new genera and species. By S. A. Rohwer. Pp. 83-109. June 28, 1921.

2362. Barnacles of the San Juan Islands, Washington. By Henry A. Pilsbry. Pp. 111-115, 2 figs., 1 pl. June 27, 1921.

2363. Tertiary fossil plants from the Dominican Republic. By Edward W. Berry. Pp. 117-127, 1 pl. June 28, 1921.

2364. First supplement to "Type Species of the Genera of Ichneumon-flies." By Henry L. Viereck. Pp. 129-150. June 11, 1921.

2365. New species of North American clerid beetles of the genus *Aulicus*. By Charles Schaeffer. Pp. 151-159. June 28, 1921.

2366. Notes and descriptions of Neotropical sawflies of the subfamily Perreyiinae. By S. A. Rohwer. Pp. 161-167. June 20, 1921.

2367. Tertiary fossil plants from Costa Rica. By Edward W. Berry. Pp. 169-185, 6 pls. June 14, 1921.

2368. American gallflies of the family Cynipidae producing subterranean galls on oak. By Lewis H. Weld. Pp. 187-246, 10 pls. June 27, 1921.

2369. New mollusks from Camaguey and Santa Clara Provinces, Cuba. By Carlos de la Torre and John B. Henderson. Pp. 247-267, 5 pls. July 12, 1921.

Proc. No.

2370. North American predaceous beetles of the tribe Tillini in the United States National Museum. By A. B. Wolcott. Pp. 269-290, 1 pl. June 24, 1921.

2371. Descriptive catalogue of the collection of Buddhist art in the United States National Museum. By I. M. Casanowicz. Pp. 291-347, 49 pls. June 18, 1921.

2372. New species of Lepidoptera in the United States National Museum. By William Schaus. Pp. 349-396. Aug. 13, 1921.

2373. Description of ferroanthophyllite, an orthorhombic iron amphibole from Idaho, with a note on the nomenclature of the anthophyllite group. By Earl V. Shannon. Pp. 397-401. Aug. 3, 1921.

2374. Some notes on wasps of the subfamily Nyssoninae, with descriptions of new species. By S. A. Rohwer. Pp. 403-413. Aug. 11, 1921.

2375. Description of vivianite encrusting a fossil tusk from gold placers of Clearwater County, Idaho. By Earl V. Shannon. Pp. 415-417, 1 fig., 1 pl. Aug. 6, 1921.

2376. The crystallography and chemical composition of creedite. By William F. Foshag. Pp. 419-424, 3 figs. Aug. 4, 1921.

2377. The North American semiparasitic copepods of the genus *Clausidium*. By Charles Branch Wilson. Pp. 425-431, 2 pls. Aug. 11, 1921.

2378. Notes on certain genera of parasitic Cynipidae proposed by Ashmead with descriptions of genotypes. By Lewis H. Weld. Pp. 433-451, 9 figs. Aug. 18, 1921.

2379. A new Cretaceous rudistid from the San Felipe formation of Mexico. By Timothy W. Stanton. Pp. 453-454, 2 pls. Sept. 14, 1921.

2380. Some Eocene insects of the family Fulgoridae. By T. D. A. Cockerell and Grace Sandhouse. Pp. 455-457, 1 pl. Sept. 15, 1921.

2381. Crustacea from Lake Valencia, Venezuela. By A. S. Pearse. Pp. 459-462, 2 figs. Aug. 11, 1921.

2382. Sexual differences in coloration in the spotted turtle, *Clemmys guttata*. By S. F. Blake. Pp. 463-469, 1 pl. Sept. 13, 1921.

2383. The Troup, Texas, meteorite. By J. A. Udden. Pp. 471-476, 2 figs., 3 pls. Sept. 15, 1921.

2384. On the mineral composition and structure of the Troup meteorite. By George P. Merrill. Pp. 477-478. Sept. 15, 1921.

2385. A crystallographic study of the datolite from Westfield, Massachusetts. By Earl V. Shannon. Pp. 479-539, 24 figs., 4 pls. Oct. 10, 1921.

2386. Two new genera of nematodes, with a note on a neglected nematode structure. By Maurice C. Hall. Pp. 541-546, 2 figs. Oct. 5, 1921.

2387. Three new myrmecophilous beetles. By William M. Mann. Pp. 547-552, 6 figs. Oct. 5, 1921.

2388. Tertiary fossil plants from Venezuela. By Edward W. Berry. Pp. 553-579, 4 figs., 3 pls. Oct. 14, 1921.

2389. The fauna of the Arundel formation of Maryland. By Charles W. Gilmore. Pp. 581-594, 5 pls. Oct. 7, 1921.

2390. Some interesting dragon-fly naiads from Texas. By Clarence Hamilton Kennedy. Pp. 595-598, 1 pl. Oct. 10, 1921.

2391. Descriptions of species of Pleistocene Vertebrata, types or specimens of most of which are preserved in the United States National Musum. By Oliver P. Hay. Pp. 599-642, 9 pls. Oct. 13, 1921.

2392. Description of deep-sea fishes from the coast of Hawaii, killed by a lava flow from Mauna Loa. By David Starr Jordan. Pp. 643-656, 8 figs. Oct. 14, 1921.

2393. A new species of ray from the Texas coast, and report of the occurrence of a top minnow new to the fauna of eastern Texas. By Asa C. Chandler. Pp. 657-658. Oct. 5, 1921.

2394. New Nearctic spider mites of the family Tetranychidae. By H. E. Ewing. Pp. 659-666, 1 pl. Oct. 7, 1921.

2395. Ludwigites from Idaho and Korea. By Earl V. Shannon. Pp. 667-676. Oct. 5. 1921.

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Proceedings of the United States National Museum, vol. 60. Pp. i-xviii (title page, advertisement, table of contents, and list of illustrations); arts. 1-26; (Proceedings papers 2396-2421, paged separately). 1922.

Proc. No.

2396. North American sawflies of the subfamily Cladiinae. By S. A. Rohwer, with notes on habits and descriptions of larvae by William Middleton. Art. 1, pp. 1-46, 7 pls. Jan. 26, 1922.

2397. *Nereis (Ceratonereis) alaskensis,* a new polychaetous annelid from Alaska. By A. L. Treadwell. Art. 2, pp. 1-3, 4 figs. Jan. 3, 1922.

2398. Mineralogy of some black sands from Idaho, with a description of the methods used for their study. By Earl V. Shannon. Art. 3, pp. 1-33, 28 figs. Jan. 10, 1922.

2399. North American ichneumon-flies of the genera *Clistopyga* and *Schizopyga.* By R. A. Cushman. Art. 4, pp. 1-14, 14 figs. Jan. 4, 1922.

2400. North American parasitic copepods belonging to the family Dichelesthiidae. By Charles Branch Wilson. Art. 5, pp. 1-100, 13 pls. Mar. 22, 1922.

2401. A contribution to the anatomy of *Dinobothrium,* a genus of selachian tapeworms; with descriptions of two new species. By Edwin Linton. Art. 6, pp. 1-13, 4 pls. Jan. 23, 1922.

2402. The centipeds of Central America. By Ralph V. Chamberlin. Art. 7, pp. 1-17, 4 pls. Jan. 7, 1922.

2403. The millipeds of Central America. By Ralph V. Chamberlin. Art. 8, pp. 1-75, 25 pls. Mar. 14, 1922.

2404. Synoptic series of obects in the United States National Museum illustrating the history of inventions. By Walter Hough. Art. 9, pp. 1-47, 56 pls. Feb. 13, 1922.

2405. An illustrated synopsis of the puparia of 100 muscoid flies (Diptera). By Charles T. Greene. Art. 10, pp. 1-39, 20 pls. Jan. 13, 1922.

2406. Notes on Nearctic bibionid flies. By W. L. McAtee. Art. 11, pp. 1-27. Jan. 12, 1922.

2407. A redescription of the type species of the genera of Coccidae based on species originally described by Maskell. By Harold Morrison and Emily Morrison. Art. 12, pp. 1-120, 37 figs., 6 pls. May 12, 1922.

2408. On a new silurid fish from the Yalu River, South Manchuria. By Arthur de Carle Sowerby. Art. 13, pp. 1-2. Dec. 28, 1921.

2409. The jade of the Tuxtla statuette. By Henry S. Washington. Art. 14, pp. 1-12, 2 pls. Feb. 23, 1922.

2410. Suggestions for collecting and preparing diatoms. By Albert Mann. Art. 15, pp. 1-8. Feb. 13, 1922.

2411. Notes on an andorite-bearing silver ore from Nevada. By Earl V. Shannon. Art. 16, pp. 1-5. May 25, 1922.

2412. Synopsis of the North American flies of the genus *Tachytrechus.* By Charles T. Greene. Art. 17, pp. 1-21, 1 pl. May 5, 1922.

2413. Bees in the collection of the United States National Museum.—4. By T. D. A. Cockerell. Art. 18, pp. 1-20. Apr. 27, 1922.

2414. *Brooksina,* a new pentameroid genus from the Upper Silurian of southeastern Alaska. By Edwin Kirk. Art. 19, pp. 1-8, 1 pl. May 5, 1922.

2415. Two new intestinal trematodes from the dog in China. By Marcos A. Tubangui. Art. 20, pp. 1-12, 4 pls. May 3, 1922.

2416. New species of ichneumon-flies with taxonomic notes. By R. A. Cushman. Art. 21, pp. 1-28, 1 fig. Apr. 28, 1922.

2417. Velardeñite from a new locality in Tulare County, California. By Earl V. Shannon. Art. 22, pp. 1-4. May 4, 1922.

2418. A new description of *Saniwa ensidens* Leidy, an extinct varanid lizard from Wyoming. By Charles W. Gilmore. Art. 23, pp. 1-28, 22 figs., 3 pls. June 8, 1922.

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Proc. No.

2419. Terrestrial Isopoda collected in Java by Dr. Edward Jacobson with descriptions of five new species. By Harriet Richardson Searle. Art. 24, pp. 1-7, 2 pls. May 5, 1922.

2420. Undescribed species of Costa Rican flies belonging to the family Tipulidae in the United States National Museum. By Charles P. Alexander. Art. 25, pp. 1-7. Apr. 25, 1922.

2421. Description of a new species of agamid lizard from the Malay Peninsula. By Doris M. Cochran. Art. 26, pp. 1-3. March 13, 1922.

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Proceedings of the United States National Museum, vol. 61. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); arts. 1-25 (Proceedings papers 2422-2446, paged separately). 1922.

2422. Some Upper Cretaceous shells of the rudistid group from Tamaulipas, Mexico. By L. W. Stephenson. Art. 1, pp. 1-28, 15 pls. June 13, 1922.

2423. A revision of the chalcid-flies of the cyrtid genus *Chrysoplatycerus*. By P. H. Timberlake. Art. 2, pp. 1-10, 2 figs., 1 pl. Apr. 25, 1922.

2424. The smallest known horned dinosaur, *Brachyceratops*. By Charles W. Gilmore. Art. 3, pp. 1-4, 4 pls. Apr. 24, 1922.

2425. On meteoric irons from Alpine, Brewster County, Texas, and Signal Mountain, Lower California, and a pallasite from Cold Bay, Alaska. By George P. Merrill. Art. 4, pp. 1-4, 2 pls. Apr. 25, 1922.

2426. Crinoids from the Upper Cretaceous of Tamaulipas, Mexico. By Frank Springer. Art. 5, pp. 1-4, 1 pl. Apr. 25, 1922.

2427. Studies on chalcid-flies of the subfamily Leucospidinae, with descriptions of new species. By Clara Jamieson Weld. Art. 6, pp. 1-43, 2 figs., 4 pls. June 28, 1922.

2428. New buprestid beetles from Borneo and the Philippine Islands. By W. S. Fisher. Art. 7, pp. 1-18. Apr. 28, 1922.

2429. On the Ashmead manuscript species of Ichneumonidae of Mrs. Slosson's Mount Washington lists. By R. A. Cushman. Art. 8, pp. 1-30. May 22, 1922.

2430. A new genus of trematodes from the white bass. By H. J. Van Cleave. Art. 9, pp. 1-8, 1 pl. May 24, 1922.

2431. Notes on West Indian millipeds. By Ralph V. Chamberlin. Art 10, pp. 1-19, 6 pls. July 6, 1922.

2432. Parsee religious ceremonial objects in the United States National Museum. By I. M. Casanowicz. Art. 11, pp. 1-16, 7 pls. May 3, 1922.

2433. A new cestode from the maneater and mackerel sharks. By Edwin Linton. Art. 12, pp. 1-16, 3 pls. May 25, 1922.

2434. Ants from Honduras and Guatemala. By William M. Mann. Art. 13, pp. 1-54, 22 figs. June 14, 1922.

2435. Description of the skull of *Megaptera miocaena*, a fossil humpback whale from the Miocene diatomaceous earth of Lompoc, California. By Remington Kellogg. Art. 14, pp. 1-18, 10 figs., 4 pls. July 3, 1922.

2436. A revision of the North American inchneumon-flies, belonging to the subfamilies Neoneurinae and Microgasterinae. By C. F. W. Muesebeck. Art. 15, pp. 1-76, 1 pl. Aug. 5, 1922.

2437. New pearly fresh water mussels from South America. By William B. Marshall. Art. 16, pp. 1-9, 3 pls. Apr. 28, 1922.

2438. Description of a new fossil sea cow from Florida, *Metaxytherium floridanum*. By Oliver P. Hay. Art. 17, pp. 1-4, 1 pl. May 3, 1922.

2439. Notes on cynipid wasps, with descriptions of new North American species. By Lewis H. Weld. Art. 18, pp. 1-29, 3 figs., 1 pl. June 28, 1922.

2440. Notes on American gallflies of the family Cynipidae producing galls on acorns, with descriptions of new species. By Lewis H. Weld. Art. 19, pp. 1-32, 3 figs., 5 pls. June 28, 1922.

Proc. No.

2441. New termites from Hawaii, Central and South America, and the Antilles. By Thomas E. Snyder. Art. 20, pp. 1-32, 6 figs., 5 pls. May 25, 1922.

2442. Descriptions of some North American sawfly larvae. By William Middleton. Art 21, pp. 1-31, 8 figs. May 12, 1922.

2443. Studies on the cyclostomatous Bryozoa. By Ferdinand Canu and Ray S. Bassler. Art. 22, pp. 1-160, 40 figs., 28 pls. Oct. 6, 1922.

2444. A new cecidomyiid parasite of the white fly. By E. P. Felt. Art. 23, pp. 1-2. Nov. 2, 1922.

2445. Descriptions of miscellaneous new reared parasitic Hymenoptera. By A. B. Gahan. Art. 24, pp. 1-24, 1 pl. May 25, 1922.

2446. Two-winged flies of the genera *Dolichopus* and *Hydrophorus* collected in Alaska in 1921, with new species of *Dolichopus* from North America and Hawaii. By J. M. Aldrich. Art. 25, pp. 1-18. May 3, 1922.

Volume 62

Proceedings of the United States National Museum, vol. 62. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); arts. 1-22 (Proceedings papers 2447-2468, paged seperately). 1923.

2447. The mosquitoes of the United States. By Harrison G. Dyar. Art. 1, pp. 1-119. June 28, 1922.

2448. Fishes from Formosa and the Philippine Islands. By Henry W. Fowler and Barton A. Bean. Art. 2, pp. 1-73, 4 figs. July 28, 1922.

2449. Seven new species of fish of the order Malacopterygii. By W. W. Welsh. Art. 3, pp. 1-11, 10 figs. Feb. 10, 1923.

2450. A revision of the North American two-winged flies of the family Therevidae. By Frank R. Cole. Art. 4, pp. 1-140, 3 figs., 13 pls. May 10, 1923.

2451. A new fossil turtle, *Kinosternon arizonense*, from Arizona. By Charles W. Gilmore. Art. 5, pp. 1-8, 7 figs., 5 pls. Feb. 6, 1923.

2452. Rehabilitation of a hitherto overlooked species of musk turtle of the southern States. By Leonhard Stejneger. Art. 6, pp. 1-3. Feb. 10, 1923.

2453. Two new Lithothamnieae, calcareous algae, from the Lower Miocene of Trinidad, British West Indies. By Marshall A. Howe. Art. 7, pp. 1-3, 4 pls. Dec. 22, 1922.

2454. The leaf and twig mining buprestid beetles of Mexico and Central America. By Warren S. Fisher. Art. 8, pp. 1-95. Dec. 22, 1922.

2455. Mineralogic notes on pucherite, pyrite, trichalcite, and wavellite. By Earl V. Shannon. Art. 9, pp. 1-10, 10 figs. Jan. 5, 1923.

2456. Species of round worm (*Gongylonema*) from domestic swine in the United States. By Edward A. Chapin. Art. 10, pp. 1-3, 3 figs. Dec. 8, 1922.

2457. The Neotropical muscoid genus *Mesembrinella* Giglio-Tos and other testaceous muscoid flies. By J. M. Aldrich. Art. 11, pp. 1-24. Dec. 19, 1922.

2458. On siderite and associated minerals from the Columbia River basalt at Spokane, Washington. By Earl V. Shannon. Art. 12, pp. 1-19, 14 figs., 3 pls. Mar. 29, 1923.

2459. The dermanyssid mites of North America. By H. E. Ewing. Art. 13, pp. 1-26, 7 figs., 2 pls. Jan. 27, 1923.

2460. Tertiary fossil plants from the Republic of Haiti. By Edward W. Berry. Art 14, pp. 1-10, 2 figs., 1 pl. Dec. 28, 1922.

2461. Notes on the mineralogy of three gouge clays from precious metal veins. By Earl V. Shannon. Art. 15, pp. 1-11. Nov. 22, 1924.

2462. Description of two squalodonts recently discovered in the Calvert Cliffs, Maryland; and notes on the shark-toothed cetaceans. By Remington Kellogg. Art. 16, pp. 1-69, 3 figs., 20 pls. Apr. 24, 1923.

2463. The scale insects of the subfamilies Monophlebinae and Margarodinae treated by Maskell. By Harold Morrison and Emily Morrison. Art. 17, pp. 1-47, 19 figs., 3 pls. June 9, 1923.

Proc. No.

2464. A meteoric metabolite from Dungannon, Virginia. By George P. Merrill. Art. 18, pp. 1-2, 2 pls. Mar. 19, 1923.

2465. Miocene plants from southern Mexico. By Edward W. Berry. Art. 19, pp. 1-27, 1 fig., 7 pls. June 2, 1923.

2466. New genera of two-winged flies of the subfamily Leptogastrinae of the family Asilidae. By J. M. Aldrich. Art. 20, pp. 1-6, 3 figs. Feb. 13, 1923.

2467. The dragonflies (Odonata) of Burma and Lower Siam—III. Subfamily Aeschninae. By Frank Fortescue Laidlaw. Art. 21, pp. 1-29, 1 pl. June 21, 1923.

2468. *Steiroxys hendersoni,* a new katydid from Utah. By A. N. Caudell. Art. 22, pp. 1-2, 1 fig. Feb. 13, 1923.

Volume 63

Proceedings of the United States National Museum, vol. 63. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); arts. 1-21 (Proceedings papers 2469-2490, paged separately). 1924.

2469. Paleocene primates of the Fort Union, with discussion of relationships of Eocene primates. By James Williams Gidley. Art. 1, pp. 1-38, 4 figs., 5 pls. Apr. 28, 1923.

2470. A revision of the North American species of ichneumon-flies belonging to the genus *Meteorus* Haliday. By C. F. W. Muesebeck. Art. 2, pp. 1-44, 2 figs. June 28, 1923.

2471. Three new trematodes from *Amphiuma means.* By Asa C. Chandler. Art. 3, pp. 1-7, 2 pls. Apr. 28, 1923.

2472. Note on *Icichthys lockingtoni* Jordan and Gilbert, a pelagic fish from California. By David Starr Jordan. Art. 4, pp. 1-3, 1 pl. June 2, 1923.

2473. Description of remains of *Bison occidentalis* from central Minnesota. By Oliver P. Hay. Art. 5, pp. 1-8, 2 pls. May 9, 1923.

2474. Two Asiatic muscoid flies parasitic upon the so-called Japanese beetle. By J. M. Aldrich. Art. 6, pp. 1-4. Apr. 13, 1923.

2475. A fossil cichlid fish from the Republic of Haiti. By T. D. A. Cockerell. Art. 7, pp. 1-2, 1 pl. Apr. 27, 1923.

2476. Some bees from Victoria, Mexico. By T. D. A. Cockerell. Art. 8, pp. 1-5. Apr. 16, 1923.

2477. Fossil crabs from the Republic of Haiti. By Mary J. Rathbun. Art. 9, pp. 1-6, 2 pls. Apr. 28, 1923.

2478. Additions and emendations to United States National Museum Bulletin No. 112. By William H. Dall. Art. 10, pp. 1-4. Apr. 12, 1923.

2479. Crystallographic notes on stephanite in a silver ore from Mexico. By Earl V. Shannon. Art. 11, pp. 1-6, 4 figs. Apr. 12, 1923.

2480. Catalogue of human crania in the United States National Museum collections: The Eskimo, Alaska and related Indians, Northeastern Asiatics. By Aleš Hrdlička. Art. 12, pp. 1-51. Mar. 14, 1924.

2481. Descriptions of new American and Chinese spiders, with notes on other Chinese species. By Ralph V. Chamberlin. Art. 13, pp. 1-38, 7 pls. Feb. 8, 1924.

2482. A fossil porpoise from the Calvert formation of Maryland. By Remington Kellogg. Art. 14, pp. 1-39, 18 pls. Mar. 26, 1924.

2483. Description of a new genus and species of whalebone whale from the Calvert Cliffs, Maryland. By Remington Kellogg. Art. 15, pp. 1-14, 6 pls. Feb. 5, 1924.

2484. Revision of the North American wasps of the subfamily Platygasterinae. By Robert M. Fouts. Art. 15a, pp. 1-145, 10 figs, 1 pl. June 30, 1924.

2485. New pearly fresh-water mussels from Mexico and Uruguay. By William B. Marshall. Art. 16, pp. 1-4, 3 pls. Jan. 8, 1924.

2486. The North American species of parasitic two-winged flies belonging to the genus *Phorocera* and allied genera. By J. M. Aldrich and Ray T. Webber. Art. 17, pp. 1-90, 1 fig. Feb. 29, 1924.

Proc. No.

2487. Recently found meteoric irons from Mesa Verde Park, Colo., and Savannah, Tenn. By George P. Merrill. Art. 18, pp. 1-4, 3 pls. Mar. 4, 1924.

2488. Descriptions of eighteen new species of fishes from the Wilkes Exploring Expedition, preserved in the United States National Museum. By Henry W. Fowler and Barton A. Bean. Art. 19, pp. 1-27. Dec. 22, 1923.

2489. On the taxonomy, biology, and distribution of the biting lice of the family Gyropidae. By H. E. Ewing. Art. 20, pp. 1-42, 18 figs., 1 pl. Mar. 4, 1924.

2490. Notes and descriptions of two-winged flies of the family Dolichopodidae from Alaska. By M. C. Van Duzee. Art. 21, pp. 1-16, 1 pl. Jan. 4, 1924.

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Proceedings of the United States National Museum, vol. 64. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); arts. 1-23 (Proceedings papers 2491-2513, paged separately). 1925.

2491. Tertiary mollusks of the genus *Orthaulax* from the Republic of Haiti, Porto Rico, and Cuba. By Wendell P. Woodring. Art. 1, pp. 1-12, 2 pls. Dec. 22, 1923.

2492. The Sharps meteorite, Richmond County, Virginia. By Thomas L. Watson. Art. 2, pp. 1-4, 2 pls. Dec. 22, 1923.

2493. A remarkable new sea star from Japan. By W. K. Fisher. Art. 3, pp. 1-6, 6 figs., 2 pls. Mar. 18, 1924.

2494. New genera and species of ichneumon-flies. By R. A. Cushman. Art. 4, pp. 1-16, 2 figs. Jan. 12, 1924.

2495. Fossil birds from southeastern Arizona. By Alexander Wetmore. Art. 5, pp. 1-18, 9 figs. Jan. 15, 1924.

2496. Descriptions of new species and hitherto unknown castes of termites from America and Hawaii. By Thomas E. Snyder. Art 6, pp. 1-40, 5 pls. May 10, 1924.

2497. Studies of larvae of crabs of the family Pinnotheridae. By O. W. Hyman. Art. 7, pp. 1-9, 6 pls. Mar. 5, 1924.

2498. A synopsis of the species of *Boeckella* and *Pseudoboeckella* with a key to the genera of the fresh-water Centropagidae. By C. Dwight Marsh. Art. 8, pp. 1-28, 35 figs. Mar. 19, 1924.

2499. The heteronereis phase of a new species of a polychaetous annelid from Uruguay. By Aaron L. Treadwell. Art. 9, pp. 1-3, 1 pl. Dec. 22, 1923.

2500. New species of two-winged flies from western North America belonging to the family Tipulidae. By Charles P. Alexander. Art. 10, pp. 1-16. Mar. 11, 1924.

2501. Revision of the two-winged flies of the family Clusiidae. By A. L. Melander and Naomi George Argo. Art. 11, pp. 1-54, 4 pls. May 16, 1924.

2502. Notes and descriptions of naiads belonging to the dragonfly genus *Helocordulia*. By Clarence Hamilton Kennedy. Art. 12, pp. 1-4, 1 pl. Mar. 5, 1924.

2503. Fossil insects in the United States National Museum. By T. D. A. Cockerell. Art. 13, pp. 1-15, 2 figs., 2 pls. Feb. 2, 1924.

2504. New species and subspecies of spider crabs. By Mary J. Rathbun. Art. 15, pp. 1-5. Jan. 2, 1924.

2505. A revision of the mutillid wasps of the genera *Myrmilloides* and *Pseudomethoca* occurring in America north of Mexico. By Clarence E. Mickel. Art. 15, pp. 1-52, 4 pls. June 17, 1924.

2506. A collection of birds from north and north-central Celebes. By J. H. Riley. Art. 16, pp. 1-118. Oct. 28, 1924.

2507. New North American parasitic copepods, new hosts, and notes on copepod nomenclature. By Charles Branch Wilson. Art. 17, pp. 1-22, 3 pls. July 7, 1924.

2508. Notes on certain catostomids of the Bonneville system of Utah, including the type of *Pantosteus virescens* Cope. By John Otterbein Snyder. Art. 18, pp. 1-6. Mar. 5, 1924.

Proc. No.

2509. Mordenite and associated minerals from near Challis, Custer County, Idaho. By Clarence S. Ross and Earl V. Shannon. Art. 19, pp. 1-19, 6 figs., 3 pls. Mar. 22, 1924.

2510. On the genera of the ichneumon-flies of the tribe Paniscini Ashmead, with descriptions and discussion of related genera and species. By R. A. Cushman. Art. 20, pp. 1-48, 7 figs. Jan. 12, 1924.

2511. Notes on cestode parasites of sharks and skates. By Edwin Linton. Art. 21, pp. 1-114, 13 pls. Oct. 27, 1924.

2512. Notes on birds collected by Dr. W. L. Abbott on the Karimata Islands, off west Borneo. By Harry C. Oberholser. Art. 22, pp. 1-4. Mar. 28, 1924.

2513. The blister beetle *Tricrania sanguinipennis*—biology, descriptions of different stages, and systematic relationship. By J. B. Parker and Adam G. Böving. Art. 23, pp. 1-40, 1 fig., 5 pls. July 30, 1924.

Volume 65

Proceedings of the United States National Museum, vol. 65. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations; arts. 1-24 (Proceedings papers 2514-2537, paged separately). 1925.

2514. Studies on the larvae of North American beetles of the subfamily Tenebrioninae with a description of the larva and pupa of *Merinus laevis* (Olivier). By R. A. St. George. Art. 1, pp. 1-22, 4 pls. July 19, 1924.

2515. Miocene and Pleistocene Cirripedia from Haiti. By Henry A. Pilsbry. Art. 2, pp. 1-3, 1 pl. May 10, 1924.

2516. A Tertiary crinoid from the West Indies. By Frank Springer. Art. 3, pp. 1-8, 1 pl. May 12, 1924.

2517. Some parasitic Hymenoptera with notes on several described forms. By A. B. Gahan. Art. 4, pp. 1-23. July 19, 1924.

2518. A new nautiloid cephalopod, *Eutrephoceras sloani,* from the Eocene of South Carolina. By John B. Reeside, Jr. Art. 5, pp. 1-4, 1 fig., 3 pls. May 10, 1924.

2519. Description of a recently discovered fossil sculpin from Nevada regarded as *Cottus beldingi.* By David Starr Jordan. Art. 6, pp. 1-2, 1 pl. Sept. 12, 1924.

2520. New species of moths in the United States National Museum. By William Schaus. Art. 7, pp. 1-74. June 2, 1924.

2521. Notes on the osteology and dentition of the genera *Desmostylus* and *Cornwallius.* By Oliver P. Hay. Art. 8, pp. 1-8, 2 figs., 2 pls. July 19, 1924.

2522. A revision of the West Indian Coleoptera of the family Buprestidae. By Warren S. Fisher. Art. 9, pp. 1-207. Mar. 27, 1925.

2523. Studies on larvae of crabs of the family Grapsidae. By O. W. Hyman. Art. 10, pp. 1-8, 3 pls. Oct. 6, 1924.

2524. *Amastridium,* a neglected genus of snakes. By E. R. Dunn. Art. 11, pp. 1-3. Apr. 1, 1924.

2525. Keys to flies of the families Lonchaeidae, Pallopteridae, and Sapromyzidae of the eastern United States, with a list of the species of the District of Columbia region. By J. R. Malloch and W. L. McAtee. Art. 12, pp. 1-26, 2 pls. Sept. 9, 1924.

2526. Nematode parasites of the Brazilian land-tortoise, *Testudo denticulata.* Results of the Mulford Biological Exploration.—Helminthology. By Edward A. Chapin. Art. 13, pp. 1-6, 2 pls. Sept. 9, 1924.

2527. A remarkable new genus and species of mermithid worms from Jamaica. By G. Steiner. Art. 14, pp. 1-4, 2 pls. Apr. 25, 1924.

2528. The magic, psychic, ancient Egyptian, Greek, and Roman medical collections of the Division of Medicine in the United States National Museum. By Charles Whitebread. Art. 15, pp. 1-44, 24 figs., 5 pls. Nov. 24, 1924.

2529. Synopsis of the North American flies of the genus *Scellus.* By Charles T. Greene. Art. 16, pp. 1-18, 3 pls. Sept. 9, 1924.

2530. Studies on the morphology, taxonomy, and ecology of the larvae of Holarctic tiger-beetles (family Cicindelidae). By Clyde C. Hamilton. Art. 17, pp. 1-87, 12 pls. Apr. 24, 1925.

Proc. No.

2531. Notes on Entomostraca from Colorado. The Shantz collections from the Pikes Peak region. By G. S. Dodds. Art. 18, pp. 1-7, 1 fig. May 12, 1924.

2532. New American species of bees belonging to the genus *Halictus* (*Chloralictus*). By Grace Adelbert Sandhouse. Art. 19, pp. 1-43. Sept. 9, 1924.

2533. Hookworms of the genus *Uncinaria* of the dog, fox, and badger. By B. H. Ransom. Art. 20, pp. 1-5, 1 pl. July 8, 1924.

2534. A new genus and species of two-winged flies of the family Chloropidae injuring *Manihot* in Brazil. By J. M. Aldrich. Art. 21, pp. 1-2. June 7, 1924.

2535. The fossils of the Lower San Pedro fauna of the Nob Hill cut, San Pedro, California. By T. S. Oldroyd. Art. 22, pp. 1-39, 2 pls. June 16, 1925.

2536. A new marine annelid from Chile. By A. L. Treadwell. Art. 23, pp. 1-3, 4 figs. Aug. 9, 1924.

2537. Benjaminite, a new sulphosalt mineral of the klaprotholite group. By Earl V. Shannon. Art. 24, pp. 1-9, 3 figs. June 17, 1924.

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Proceedings of the United States National Museum, vol. 66. Pp. xviii (title page, advertisement, table of contents, and list of illustrations); arts. 1-35 (Proceedings papers 2538-2572, paged separately). 1926.

2538. Parasitic nematodes from Tonkin, Indo-China, including a new species of *Ascaridia*. By Benjamin Schwartz. Art. 1, pp. 1-9, 1 fig. May 14, 1925.

2539. The mineralogy and petrology of intrusive Triassic diabase at Goose Creek, Loudoun County, Virginia. By Earl V. Shannon. Art. 2, pp. 1-86, 32 figs., 9 pls. Dec. 13, 1924.

2540. Descriptions of Neotropical two-winged flies of the family Drosophilidae. By J. R. Malloch. Art. 3, pp. 1-11. Oct. 13, 1924.

2541. *Senecella calanoides*, a recently described fresh-water copepod. By Chancey Juday. Art. 4, pp. 1-6, 3 pls. May 23, 1925.

2542. A contribution toward the classification of the weevil larvae of the subfamily Calendrinae, occurring in North America. By Richard T. Cotton. Art. 5, pp. 1-11, 10 pls. Oct. 11, 1924.

2543. Notes on the herpetological collections made by Dr. W. L. Abbott on the island of Haiti. By Doris M. Cochran. Art. 6, pp. 1-15. Oct. 15, 1924.

2544. Some hitherto unpublished photographs and measurements of the blue whale. By Gerrit S. Miller, Jr. Art. 7, pp. 1-4, 9 pls. Nov. 3, 1924.

2545. A second instance of the development of rodent-like incisors in an artiodactyl. By Gerrit S. Miller, Jr. Art. 8, pp. 1-3, 1 pl. Oct. 13, 1924.

2546. A pollack whale from Florida presented to the National Museum by the Miami Aquarium Association. By Gerrit S. Miller, Jr. Art. 9, pp. 1-15, 22 pls. Dec. 11, 1924.

2547. Notes on Oriental dragonflies of the genus *Aciagrion*. By Frank Fortescue Laidlaw. Art. 10, pp. 1-9, 1 pl. Oct. 13, 1924.

2548. A new species of round worm of the genus *Trichostrongylus* from the rabbit. By H. W. Graybill. Art. 11, pp. 1-2, 1 pl. Oct. 8, 1924.

2549. A new earthworm from Texas belonging to the genus *Diplocardia*. By Frank Smith. Art. 12, pp. 1-6. Oct. 6, 1924.

2550. New species of mollusks of the genus *Chilina*. By William B. Marshall. Art. 13, pp. 1-5, 1 pl. Oct. 8, 1924.

2551. New mollusks from Santa Elena Bay, Ecuador. By Paul Bartsch. Art. 14, pp. 1-9, 2 pls. Oct. 17, 1924.

2552. New Uruguayan mollusks of the genus *Corbicula*. By William B. Marshall. Art. 15, pp. 1-12, 2 pls. Nov. 3, 1924.

2553. Some parasitic round worms of the rabbit with descriptions of two new species. By Asa C. Chandler. Art. 16, pp. 1-6, 2 pls. Nov. 3, 1924.

2554. Illustrations of unfigured types of shells in the collection of the United States National Museum. By William Healey Dall. Art. 17, pp. 1-41, 36 pls. Sept. 22, 1925.

Proc. No.

2555. New Diptera or two-winged flies in the United States National Museum. By J. M. Aldrich. Art. 18, pp. 1-36, 1 fig. Jan. 24, 1925.

2556. Plant and insect fossils from the Green River Eocene of Colorado. By T. D. A. Cockerell. Art. 19, pp. 1-13, 2 pls. Feb. 16, 1925.

2557. A rare Cretaceous sea urchin, *Scutellaster cretaceus* Cragin. By John B. Reeside, Jr. Art. 20, pp. 1-4, 2 figs., 1 pl. Dec. 9, 1924.

2558. A Pleistocene flora from the Island of Trinidad. By Edward W. Berry. Art. 21, pp. 1-9, 4 pls. May 23, 1925.

2559. Miocene gastropods and scaphopods from Trinidad, British West Indies. By Wendell C. Mansfield. Art. 22, pp. 1-65, 10 pls. Sept. 18, 1925.

2560. A revision of the North American species of the genus *Argyra* Macquart, two-winged flies of the family Dolichopodidae. By M. C. Van Duzee. Art. 23, pp. 1-43, 1 pl. May 5, 1925.

2561. A new proliferating larval tapeworm from a porcupine. By Benjamin Schwartz. Art. 24, pp. 1-4, 1 pl. Dec. 26, 1924.

2562. Chinese amphibians and reptiles in the United States National Museum. By Leonhard Stejneger. Art. 25, pp. 1-115, 6 figs. July 15, 1925.

2563. On the occurrence of remains of fossil porpoises of the genus *Eurhinodelphis* in North America. By Remington Kellogg. Art. 26, pp. 1-40, 4 figs., 17 pls. May 23, 1925.

2564. A fossil physeteroid cetacean from Santa Barbara County, California. By Remington Kellogg. Art. 27, pp. 1-8, 2 pls. Feb. 28, 1925.

2565. Mineralogy and petrography of Triassic limestone conglomerate metamorphosed by intrusive diabase at Leesburg, Virginia. By Earl V. Shannon. Art. 28, pp. 1-31, 8 figs., 3 pls. May 22, 1925.

2566. The puparia and larvae of sarcophagid flies. By Charles T. Greene. Art. 29, pp. 1-26, 9 pls. Feb. 10, 1925.

2567. A new genus of Eocene Foraminifera. By Joseph A. Cushman. Art. 30, pp. 1-4, 1 fig., 2 pls. Jan. 23, 1925.

2568. Buprestid beetles collected by the Mulford Biological Exploration in Bolivia. By Warren S. Fisher. Art. 31, pp. 1-46. Feb. 13, 1925.

2569. *Harpidium,* a new pentameroid brachiopod genus from southeastern Alaska. By Edwin Kirk. Art. 32, pp. 1-7, 2 pls. Apr. 11, 1925.

2570. Notes on the fishes of Hawaii, with descriptions of six new species By Eric Knight Jordan. Art. 33, pp. 1-43, 2 pls. Sept. 22, 1925.

2571. A further and detailed description of the type of *Elephas roosevelti* Hay and descriptions of three referred specimens. By Oliver P. Hay. Art. 34, pp. 1-6, 1 fig., 4 pls. May 22, 1925.

2572. On remains of mastodons found in Texas, *Anancus brazosius* and *Gomphotherium cimarronis.* By Oliver P. Hay. Art. 35, pp. 1-15, 9 figs., 4 pls. Apr. 25, 1925.

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Proceedings of the United States National Museum, vol. 67. Pp. i-xix (title page, advertisement, table of contents, and list of illustrations); arts. 1-29 (Proceedings papers 2573-2601, paged separately). 1926.

2573. Revision of the American bugs of the reduviid subfamily Ploiariinae. By W. L. McAtee and J. R. Malloch. Art. 1, pp. 1-152, 9 pls. Apr. 16, 1925.

2574. Notes on the meteoric stone of Colby, Wisconsin. By George P. Merrill. Art 2, pp. 1-3, 1 pl. May 23, 1925.

2575. Studies on the larvae of crabs of the family Xanthidae. By O. W. Hyman. Art. 3, pp. 1-22, 14 pls. June 1, 1925.

2576. Microscopic sculpture of pearly fresh-water mussel shells. By William B. Marshall. Art. 4, pp. 1-14, 4 pls. Mar. 23, 1925.

2577. The genus *Pentacrinus* in Alaska. By Frank Springer. Art. 5, pp. 1-7, 1 pl. May 22, 1925.

2578. A new meteoric stone from Baldwyn, Mississippi. By George P. Merrill. Art. 1, pp. 1-2, 1 pl. May 22, 1925.

Proc. No.

2579. The origin, occurrence, composition, and physical properties of the mineral iddingsite. By Clarence S. Ross and Earl V. Shannon. Art. 7, pp. 1-19, 2 pls. May 15, 1925.

2580. A revision of the parasitic wasps of the genus *Microbracon* occurring in America north of Mexico. By C. F. W. Muesebeck. Art. 8, pp. 1-85, 2 pls. May 25, 1925.

2581. Unusual forms of fossil crinoids. By Frank Springer. Art. 9, pp. 1-137, 10 figs., 26 pls. Feb. 15, 1926.

2582. The Indian medical exhibit of the Division of Medicine in the United States National Museum. By Charles Whitebread. Art. 10, pp. 1-26, 20 figs., 2 pls. July 22, 1925.

2583. A synoptic review of the beetles of the tribe Osoriini from the Western Hemisphere. By Howard Notman. Art. 11, pp. 1-26. Apr. 30, 1925.

2584. A new species of polychaetous annelid from Uruguay, *Aphrodita magna*. By A. L. Treadwell. Art. 12, pp. 1-3, 2 figs. Apr. 11, 1925.

2585. Revision of bugs of the family Cryptostemmatidae in the collection of the United States National Museum. By W. L. McAtee and J. R. Malloch. Art. 13, pp. 1-42, 4 pls. Apr. 16, 1925.

2586. A review of the beetle family Pseudomorphidae, and a suggestion for a rearrangement of the Adephaga, with descriptions of a new genus and new species. By Howard Notman. Art. 14, pp. 1-34. May 25, 1925.

2587. The dragon god (Dai-Ja) in Idzumo, Japan. A Japanese tale. By I. M. Casanowicz. Art. 15, pp. 1-4, 1 pl. May 23, 1925.

2588. Eggs of a new species of nematoid worm from a shark. By G. A. MacCallum. Art. 16, pp. 1-2, 1 pl. May 9, 1925.

2589. Two new larval nematodes belonging to the genus *Porrocaecum* from mammals of the order Insectivora. By Benjamin Schwartz. Art. 17, pp. 1-8, 1 pl. May 23, 1925.

2590. Occurrence of the crinoid genus *Apiocrinus* in America. By Frank Springer. Art. 18, pp. 1-5, 1 pl. April 8, 1925.

2591. The adaptive modifications and the taxonomic value of the tongue in birds. By Leon L. Gardner. Art. 19, pp. 1-49, 16 pls. Sept. 25, 1925.

2592. A revision of the insects of the aphid genus *Amphorophora*. By Preston W. Mason. Art. 20, pp. 1-92, 18 pls. Sept. 23, 1925.

2593. Studies on the cyclostomatous Bryozoa. By Ferdinand Canu and Ray S. Bassler. Art. 21, pp. 1-124, 46 figs., 31 pls. Mar. 29, 1926.

2594. Three new land shells from Mexico. By Paul Bartsch. Art. 22, pp. 1-5, 1 pl. Dec. 14, 1925.

2595. Ten new North American ichneumon-flies. By R. A. Cushman. Art. 23, pp. 1-13. Feb. 2, 1926.

2596. South American snakes in the collection of the United States National Museum. By Afranio do Amaral. Art. 24, pp. 1-30. Dec. 23, 1925.

2597. Foraminifera of the genera *Siphogenerina* and *Pavonina*. By Joseph A. Cushman. Art. 25, pp. 1-24, 6 pls. Mar. 9, 1926.

2598. A new species of hookworm from a North American raccoon. By Benjamin Schwartz. Art. 26, pp. 1-4, 4 figs. Dec. 2, 1925.

2599. Asymmetry in the skulls of mammals. By A. Brazier Howell. Art. 27, pp. 1-18, 8 pls. Dec. 31, 1925.

2600. Supplementary observations on the skull of the fossil porpoise *Zarhachis flagellator* Cope. By Remington Kellogg. Art. 28, pp. 1-18, 5 pls. Feb. 24, 1926.

2601. A list of the annelids collected by Captain R. A. Bartlett in Alaska, 1924, with a description of a new species. By A. L. Treadwell. Art. 29, pp. 1-3, 4 figs. Nov. 18, 1925.

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Proceedings of the United States National Museum, vol. 68. Pp. i-xvii (title page, advertisement, table of contents, and list of illustrations); arts. 1-25 (Proceedings papers 2602-2626, paged separately). 1927.

Proc. No.

2602. Tertiary insects from Argentina. By T. D. A. Cockerell. Art. 1, pp. 1-5, 1 fig., 1 pl. Dec. 11, 1925.

2603. Descriptions of new internal parasites. By Edward A. Chapin. Art. 2, pp. 1-4, 4 figs. Nov. 14, 1925.

2604. Systematic notes on and descriptions of North American wasps of the subfamily Brachycistiinae. By J. R. Malloch. Art. 3, pp. 1-28, 4 pls. Feb. 17, 1926.

2605. Crane flies from the Maritime Province of Siberia. By Charles P. Alexander. Art. 4, pp. 1-21, 1 pl. Dec. 11, 1925.

2606. Tertiary insects from Kudia River, Maritime Province, Siberia. By T. D. A. Cockerell. Art. 5, pp. 1-16, 5 figs., 2 pls. Dec. 11, 1925.

2607. Some halictine bees from the Maritime Province of Siberia. By T. D. A. Cockerell. Art. 6, pp. 1-12. Dec. 23, 1925.

2608. Buprestid beetles from the Maritime Province of Siberia. By W. S. Fisher. Art. 7, pp. 1-8. Nov. 28, 1925.

2609. Sawflies from the Maritime Province of Siberia. By S. A. Rohwer. Art. 8, pp. 1-12. Dec. 28, 1925.

2610. North American species of two-winged flies belonging to the tribe Miltogrammini. By Harry W. Allen. Art. 9, pp. 1-106, 2 figs., 5 pls. May 27, 1926.

2611. Field notes on gall-inhabiting cynipid wasps with descriptions of new species. By Lewis H. Weld. Art. 10, pp. 1-131, 8 pls. May 27, 1926.

2612. New fossil fresh-water mollusks from Florida. By William B. Marshall. Art. 11, pp. 1-4, 1 pl. Feb. 19, 1926.

2613. A classification of the toothlike fossils, conodonts, with descriptions of American Devonian and Mississippian species. By E. O. Ulrich and Ray S. Bassler. Art. 12, pp. 1-63, 5 figs., 11 pls. Mar. 13, 1926.

2614. Parasitic nematodes from China. By Benjamin Schwartz. Art. 13, pp. 1-10, 3 figs. Feb. 12, 1926.

2615. Termites collected on the Mulford Biological Exploration to the Amazon Basin, 1921-1922. By Thomas E. Snyder. Art. 14, pp. 1-76, 3 figs., 3 pls. Apr. 26, 1926.

2616. A new nematode from the rat, and its life history. By Eloise B. Cram. Art. 15, pp. 1-7, 2 pls. Feb. 19, 1926.

2617. The Nearctic budworms of the lepidopterous genus *Heliothis*. By S. E. Crumb. Art. 16, pp. 1-8, 1 pl. Feb. 12, 1926.

2618. The minerals of Obsidian Cliff, Yellowstone National Park, and their origin. By William F. Foshag. Art. 17, pp. 1-18, 5 figs., 4 pls. June 14, 1926.

2619. Revision of the American leaf hoppers of the jassid genus *Typhlocyba*. By W. L. McAtee. Art. 18, pp. 1-47, 6 pls. June 10, 1926.

2620. A revision of the American lice of the genus *Pediculus*, together with a consideration of the significance of their geographical and host distribution. By H. E. Ewing. Art. 19, pp. 1-30, 8 figs., 3 pls. June 10, 1926.

2621. A new genus and species of borborid flies from South America. By Mario Bezzi. Art. 20, pp. 1-6, 2 figs. May 13, 1926.

2622. New genera and species of acalyptrate flies in the United States National Museum. By J. R. Malloch. Art. 21, pp. 1-35, 2 pls. May 29, 1926.

2623. Descriptions of new West Indian longicorn beetles of the subfamily Lamiinae. By Warren S. Fisher. Art. 22, pp. 1-40. June 10, 1926.

2624. North American two-winged flies of the genus *Cylindromyia* Meigen (*Ocyptera* of authors). By J. M. Aldrich. Art. 23, pp. 1-27, 1 pl. May 29, 1926.

2625. A collection of Pleistocene vertebrates from southwestern Texas. By Oliver P. Hay. Art. 24, pp. 1-18, 2 figs., 8 pls. June 7, 1926.

Proc. No.

2626. Amphipods of the family Bateidae in the collection of the United States National Museum. By Clarence R. Shoemaker. Art. 25, pp. 1-26, 16 figs. June 7, 1926.

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Proceedings of the United States National Museum, vol. 69. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); arts. 1-23 (Proceedings papers 2627-2649, paged separately). 1927.

2627. A new species of fluke, *Parametorchis noveboracensis*, from the cat in the United States. By See-Lü Hung. Art. 1, pp. 1-2, 1 fig. June 5, 1926.

2628. The optical properties and chemical composition of glauconite. By Clarence S. Ross. Art. 2, pp. 1-15, 2 figs. May 29, 1926.

2629. Miscellaneous new chalcid-flies of the hymenopterous family Encyrtidae. By P. H. Timberlake. Art. 3, pp. 1-34, 1 fig., 2 pls. June 12, 1926.

2630. The collection of ancient Oriental seals in the United States National Museum. By I. M. Casanowicz. Art. 4, pp. 1-23, 20 pls. Sept. 23, 1926.

2631. Catalogue of human crania in the United States National Museum collections: The Algonkin and related Iroquois; Siouan, Caddoan, Salish and Sahaptin, Shoshonean, and Californian Indians. By Aleš Hrdlička. Art. 5, pp. 1-127. May 4, 1927.

2632. A new sea star of the genus *Evasterias*. By W. K. Fisher. Art. 6, pp. 1-5, 2 pls. Dec. 16, 1926.

2633. Descriptions of new reared parasitic Hymenoptera and some notes on synonymy. By C. F. W. Muesebeck. Art. 7, pp. 1-18. Oct. 15, 1926.

2634. Crustaceans of the orders Euphausiacea and Mysidacea from the western Atlantic. By Walter M. Tattersall. Art. 8, pp. 1-31, 2 pls. Nov. 20, 1926.

2635. Review of the American xylotine syrphid-flies. By Raymond C. Shannon. Art. 9, pp. 1-52. Dec. 1, 1926.

2636. The North American two-winged flies of the family Simuliidae. By Harrison G. Dyar and Raymond C. Shannon. Art. 10, pp. 1-54, 7 pls. Feb. 25, 1927.

2637. The chrysotoxine syrphid-flies. By Raymond C. Shannon. Art. 11, pp. 1-20, 3 figs. Nov. 26, 1926.

2638. New land and fresh-water mollusks from Central and South America. By William B. Marshall. Art. 12, pp. 1-12, 3 pls. Nov. 6, 1926.

2639. American two-winged flies of the genus *Microphthalma* Macquart, with notes on related forms. By J. M. Aldrich. Art. 13, pp. 1-8. Oct. 15, 1926.

2640. Classification of the cheilostomatous Bryozoa. By Ferdinand Canu and Ray S. Bassler. Art. 14, pp. 1-42, 1 pl. Apr. 9, 1927.

2641. Polychaetous annelids from Fiji, Samoa, China, and Japan. By A. L. Treadwell. Art. 15, pp. 1-20, 2 pls. Oct. 14, 1926.

2642. A revision of the parasitic wasps of the subfamily Braconinae occurring in America north of Mexico. By C. F. W. Muesebeck. Art. 16, pp. 1-73, 1 fig., 2 pls. Mar. 17, 1927.

2643. Identity of Hallowell's snake genera *Megalops* and *Aepidea*. By Leonhard Stejneger. Art. 17, pp. 1-3. Oct. 16, 1926.

2644. Notes on the age of the continental Triassic beds in North America, with remarks on some fossil vertebrates. By F. R. von Huene. Art. 18, pp. 1-10, 8 figs. Oct. 15, 1926.

2645. *Kentriodon pernix*, a Miocene porpoise from Maryland. By Remington Kellogg. Art. 19, pp. 1-55, 20 figs., 14 pls. Feb. 5, 1927.

2646. Additional new mollusks from Santa Elena Bay, Ecuador. By Paul Bartsch. Art. 20, pp. 1-20, 3 pls. Dec. 16, 1926.

2647. Distributional notes on some Neotropical bugs of the family Nabidae, with description of a new species. By Halbert M. Harris. Art. 21, pp. 1-4. Nov. 10, 1926.

2648. Descriptions of new and little known Diptera or two-winged flies. By J. M. Aldrich. Art. 22, pp. 1-26. Dec. 27, 1926.

Proc. No.

2649. *Cymbidium,* a new genus of Silurian pentameroid brachiopods from Alaska. By Edwin Kirk. Art. 23, pp. 1-5, 1 pl. Nov. 23, 1926.

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Proceedings of the United States National Museum, vol. 70. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); arts. 1-23 (Proceedings papers 2650-2672, paged separately). 1927.

2650. American wasps of the genus *Sceliphron* Klug. By Bennett A. Porter. Art. 1, pp. 1-22, 4 pls. Dec. 1, 1926.

2651. Descriptions of larvae and pupae of two-winged flies belonging to the family Leptidae. By Charles T. Greene. Art. 2, pp. 1-20, 3 pls. Nov. 12, 1926.

2652. A fossil palm fruit from the middle Eocene of northwestern Peru. By Edward W. Berry. Art. 3, pp. 1-4, 1 pl. Oct. 5, 1926.

2653. New urocoptid land shells from Mexico. By Paul Bartsch. Art. 4, pp. 1-13, 1 pl. Nov. 29, 1926.

2654. A collection of birds from the Provinces of Yunnan and Szechwan, China, made for the National Geographic Society by Dr. Joseph F. Rock. By J. H. Riley. Art. 5, pp. 1-70. Oct. 23, 1926.

2655. Nematode eggs from the gill region of a shark, *Carcharhinus milberti.* By G. A. MacCallum. Art. 6, pp. 1-2, 1 fig. Oct. 15, 1926.

2656. Notes on cestode parasites of birds. By Edwin Linton. Art. 7, pp. 1-73, 15 pls. Feb. 8, 1927.

2657. Some braconid and chalcid flies from Formosa parasitic on aphids. By A. B. Gahan. Art. 8, pp. 1-7. Jan. 7, 1927.

2658. A review of the South American two-winged flies of the family Syrphidae. By Raymond C. Shannon. Art. 9, pp. 1-33, 1 pl. Apr. 29, 1927.

2659. On a collection of Copepoda from Florida, with a description of *Diaptomus floridanus,* new species. By C. Dwight Marsh. Art. 10, pp. 1-4, 6 figs. Dec. 16, 1926.

2660. New west American marine mollusks. By Paul Bartsch. Art. 11, pp. 1-36, 6 pls. Apr. 8, 1927.

2661. *Tanaodon,* a new molluscan genus from the Middle Devonian of China. By Edwin Kirk. Art. 12, pp. 1-4, 1 pl. Feb. 25, 1927.

2662. Contribution to the anatomy of the Chinese finless porpoise, *Neomeris phocaenoides.* By A. Brazier Howell. Art. 13, pp. 1-43, 14 figs., 1 pl. Mar. 11, 1927.

2663. A taxonomic and ecological review of the North American chalcid-flies of the genus *Callimome.* By L. L. Huber. Art. 14, pp. 1-114, 4 pls. May 25, 1927.

2664. Generic names applied to birds during the years 1916 to 1922, inclusive, with additions to Waterhouse's "Index Generum Avium." By Charles W. Richmond. Art. 15, pp. 1-44. Apr. 6, 1927.

2665. Foraminifera of the genus *Ehrenbergina* and its species. By Joseph A. Cushman. Art. 16, pp. 1-8, 2 pls. Feb. 25, 1927.

2666. Description of a new dragon fly from Lower Siam belonging to the genus *Urothemis.* By F. F. Laidlaw. Art. 17, 1-3, 1 pl. Feb. 25, 1927.

2667. Small shells from dredgings off the southeast coast of the United States by the United States Fisheries steamer *Albatross* in 1885 and 1886. By William H. Dall. Art. 18, pp. 1-134. Apr. 20, 1927.

2668. Diagnoses of undescribed new species of mollusks in the collection of the United States National Museum. By William Healey Dall. Art. 19, pp. 1-11. Feb. 9, 1927.

2669. The occurrence and properties of chlorophoenicite, a new arsenate from Franklin, New Jersey. By William F. Foshag, Harry Berman, and Robert B. Gage. Art. 20, pp. 1-6, 2 figs. Mar. 17, 1927.

Proc. No.

2670. A stony meteorite from Forksville, Mecklenburg County, Virginia. By George P. Merrill. Art. 21, pp. 1-4, 3 pls. Feb. 23, 1927.

2671. Richmond faunal zones in Warren and Clinton Counties, Ohio. By George M. Austin. Art. 22, pp. 1-18. May 4, 1927.

2672. A revision of the beetles of the genus *Oedionychis* occurring in America north of Mexico. By Doris Holmes Blake. Art. 23, pp. 1-44, 1 fig., 2 pls. Apr. 25, 1927.

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Proceedings of the United States National Museum, vol. 71. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); arts. 1-24 (Proceedings papers 2673-2696, paged separately). 1928.

2673. Description of a new species of fresh-water copepod of the genus *Moraria* from Canada. By Arthur Willey. Art. 1, pp. 1-12, 30 figs. Apr. 6, 1927.

2674. The beetles of the family Cleridae collected on the Mulford Biological Exploration of the Amazon Basin, 1921-1922. By Edward A. Chapin. Art. 2, pp. 1-10, 1 fig. Mar. 17, 1927.

2675. On a collection of orthopteroid insects from Java made by Owen Bryant and William Palmer in 1909. By A. N. Caudell. Art. 3, pp. 1-42, 4 figs. Apr. 23, 1927.

2676. Miscellaneous descriptions of new parasitic Hymenoptera with some synonymical notes. By A. B. Gahan. Art. 4, pp. 1-39, 3 figs., 1 pl. Apr. 18, 1927.

2677. A new parasitic nematode from an unknown species of bat. By Benjamin Schwartz. Art. 5, pp. 1-4, 4 figs. Apr. 6, 1927.

2678. A new genus and two new species of South American fresh-water mussels. By William B. Marshall. Art. 6, pp. 1-4, 2 pls. Apr. 9, 1927.

2679. Orthopteroid insects from the Maritime Provine of Siberia. By A. N. Caudell. Art. 7, pp. 1-7, 2 figs. May 21, 1927.

2680. Larger Foraminifera of the genus *Lepidocyclina* related to *Lepidocyclina mantelli*. By T. Wayland Vaughan. Art. 8, pp. 1-5, 4 pls. May 23, 1927.

2681. The digger wasps of North America of the genus *Podalonia (Psammophila)*. By H. T. Fernald. Art. 9, pp. 1-42, 4 figs., 2 pls. May 2, 1927.

2682. Notes on fishes obtained in Sumatra, Java, and Tahiti. By Henry W. Fowler and Barton A. Bean. Art. 10, pp. 1-15, 2 figs. May 4, 1927.

2683. Notes on the melitaeid butterfly *Euphydryas phaëton* (Drury), with descriptions of a new subspecies and a new variety. By Austin H. Clark. Art. 11, pp. 1-22, 5 pls. Apr. 22, 1927.

2684. Megachilid bees from Bolivia collected by the Mulford Biological Expedition, 1921-22. By T. D. A. Cockerell. Art. 12, pp. 1-22. June 3, 1927.

2685. A revision of the cottoid fishes of the genus *Artediellus*. By Peter Schmidt. Art. 13, pp. 1-10. July 12, 1927.

2686. A new type of caddis case from the lower Eocene of Tennessee. By Edward W. Berry. Art. 14, pp. 1-4, 1 pl. July 1, 1927.

2687. On fossil turtles from the Pleistocene of Florida. By Charles W. Gilmore. Art. 15, pp. 1-10, 4 figs., 5 pls. Aug. 30, 1927.

2688. Some peculiar fossil forms from Maryland. By Wendell C. Mansfield. Art. 16, pp. 1-9, 5 pls. July 13, 1927.

2689. The Maskell species of scale insects of the subfamily Asterolecaniinae. By Harold Morrison and Emily Morrison. Art. 17, pp. 1-67, 29 pls. Aug. 29, 1927.

2690. The geology, petrography, and mineralogy of the vicinity of Italian Mountain, Gunnison County, Colorado. By Whitman Cross and Earl V. Shannon. Art. 18, pp. 1-42, 17 figs., 2 pls. Sept. 26, 1927.

2691. The American moths of the genus *Diatraea* and allies. By Harrison G. Dyar and Carl Heinrich. Art. 19, pp. 1-48, 20 pls. Aug. 23, 1927.

2692. *Pycnodesma*, a new molluscan genus from the Silurian of Alaska. By Edwin Kirk. Art. 20, pp. 1-9, 2 pls. Aug. 4, 1927.

Proc. No.

2693. A recently found iron meteorite from Oakley, Idaho. By George P. Merrill. Art. 21, pp. 1-3, 2 pls. Sept. 12, 1927.

2694. A new nematode, *Nematodirus antilocaprae,* from the prong-horn antelope, with a key to the species of *Nematodirus.* By Emmett W. Price. Art. 22, pp. 1-4, 1 pl. July 7, 1927.

2695. A fossil insect from the lower Permian of the Grand Canyon. By Frank M. Carpenter. Art. 23, pp. 1-4, 1 pl. July 1, 1927.

2696. Catalogue of human crania in the United States National Museum collections: Australians, Tasmanians, South African Bushmen, Hottentots, and Negroes. By Aleš Hrdlička. Art. 24, pp. 1-140. Mar. 5, 1928.

Volume 72

Proceedings of the United States National Museum, vol. 72. Pp. i-xv (title page, advertisement, table of contents, and list of illustrations); arts. 1-25 (Proceedings papers 2697-2721, paged separately). 1928.

2697. Description of *Ancylostoma pluridentatum,* a hookworm of carnivores, and a review of the genus *Ancylostoma.* By Benjamin Schwartz. Art. 1, pp. 1-9, 6 figs. Oct. 27, 1927.

2698. Undescribed crane flies from the Holarctic region in the United States National Museum. By Charles P. Alexander. Art. 2, pp. 1-17, 1 pl. Nov. 2, 1927.

2699. New species of mollusks of the genus *Corbicula* from Uruguay and Brazil. By William B. Marshall. Art. 3, pp. 1-7, 1 pl. Sept. 30, 1927.

2700. Heretofore undescribed meteoric irons from [1] Bolivia, South America, [2] western Arkansas, and [3] Seneca Township, Michigan. By George P. Merrill. Art. 4, pp. 1-4, 2 pls. Sept. 29, 1927.

2701. A bibliography of the conodonts with descriptions of early Mississippian species. By Grace B. Holmes. Art. 5, pp. 1-38, 11 pls. Feb. 7, 1928.

2702. Insects of the subclass Apterygota from Central America and the West Indies. By J. W. Folsom. Art. 6, pp. 1-16, 8 pls. Dec. 10, 1927.

2703. Redescription of types of American muscoid flies in the collection of the Vienna Natural History Museum, with incidental notes. By J. M. Aldrich. Art. 7, pp. 1-35, 3 figs. Dec. 31, 1927.

2704. New parasitic Hymenoptera of the subfamily Anteoninae from the Americas. By F. A. Fenton. Art. 8, pp. 1-16, 2 pls. Oct. 29, 1927.

2705. New species of two-winged flies of the family Cyrtidae, with a new genus from the Philippines. By J. M. Aldrich. Art. 9, pp. 1-4, 2 figs. Oct. 13, 1927.

2706. Additions to the Upper Cretaceous invertebrate faunas of the Carolinas. By Lloyd W. Stephenson. Art. 10, pp. 1-25, 9 pls. Oct. 29, 1927.

2707. Rossite and metarossite; two new vanadates from Colorado. By William F. Foshag and Frank L. Hess. Art. 11, pp. 1-12, 2 figs. Dec. 31, 1927.

2708. Crystalline carnotite from Utah. By Frank L. Hess and William F. Foshag. Art. 12, pp. 1-6. Nov. 29, 1927.

2709. Miscellaneous notes and descriptions of ichneumon-flies. By R. A. Cushman. Art. 13, pp. 1-22, 2 figs. Oct. 29, 1927.

2710. Fossil and Recent Bryozoa of the Gulf of Mexico region. By Ferdinand Canu and Ray S. Bassler. Art. 14, pp. 1-199, 35 figs., 34 pls. Mar. 9, 1928.

2711. The Australian land shell, *Thersites bipartita,* and its allies. By William B. Marshall. Art. 15, pp. 1-16, 3 pls. Oct. 25, 1927.

2712. The rodents of the genus *Plagiodontia.* By Gerrit S. Miller, Jr. Art. 16, 1-8, 1 pl. Sept. 30, 1927.

2713. On some terrestrial isopods in the United States National Museum. By Hans Lohmander. Art. 17, pp. 1-18, 6 figs. Oct. 13, 1927.

2714. Millipeds of the order Colobognatha, with descriptions of six new genera and type species, from Arizona and California. By O. F. Cook and H. F. Loomis. Art. 18, pp. 1-26, 6 figs., 2 pls. Mar. 16, 1928.

2715. The green pit viper, *Trimeresurus gramineus,* in China. By Leonhard Stejneger. Art. 19, pp. 1-10, 2 figs. Dec. 15, 1927.

Proc. No.

2716. Foraminifera of the genus *Siphonina* and related genera. By Joseph A. Cushman. Art. 20, pp. 1-15, 4 pls. Dec. 14, 1927.

2717. The oxidation of meteoric irons with comparative descriptions of two new examples of magnetic iron oxides from terrestrial sources. By Earl V. Shannon. Art. 21, pp. 1-15. Oct. 13, 1927.

2718. On newly discovered meteoric irons from the Wallapai (Hualapai) Indian Reservation, Arizona. By George P. Merrill. Art. 22, pp. 1-4, 3 pls. Dec. 27, 1927.

2719. The flora of the Esmeralda formation in western Nevada. By Edward W. Berry. Art. 23, pp. 1-15, 2 pls. Dec. 19, 1927.

2720. Description of a new species of gecko from Tanganyika Territory, Africa. By Arthur Loveridge. Art. 24, pp. 1-2, 1 pl. Mar. 14, 1928.

2721. Synopsis of pentatomid bugs of the subfamilies Megaridinae and Canopinae. By W. L. McAtee and J. R. Malloch. Art. 25, pp. 1-25, 2 pls. Feb. 14, 1928.

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Proceedings of the United States National Museum, vol. 73. Pp. i-xv (title page, advertisement, table of contents, and list of illustrations); arts. 1-24 (Proceedings papers 2722-2745, paged separately). 1929.

2722. Notes on trematode parasites of birds. By Edwin Linton. Art. 1, pp. 1-36, 11 pls. Mar. 17, 1928.

2723. Two new nematodes of the family Strongylidae, parasitic in the intestines of mammals. By Benjamin Schwartz. Art. 2, pp. 1-5, 2 pls. Mar. 21, 1928.

2724. Further consideration of the shell of *Chelys* and of the constitution of the armor of turtles in general. By Oliver P. Hay. Art. 3, pp. 1-12, 2 pls. Mar. 21, 1928.

2725. New helminth parasites from Central American mammals. By Emmett W. Price. Art. 4, pp. 1-7, 2 pls. Mar. 30, 1928.

2726. Two common species of parasitic Crustacea (Sacculinidae) of the West Indies. By H. Boschma. Art. 5, pp. 1-10, 6 figs. May 19, 1928.

2727. Two new crabs from the Eocene of Texas. By Mary J. Rathbun. Art. 6, pp. 1-6, 3 pls. Apr. 3, 1928.

2728. A new fossil reptile from the Triassic of New Jersey. By Charles W. Gilmore. Art. 7, pp. 1-8, 3 figs., 3 pls. Mar. 30, 1928.

2729. A revision of the American parasitic flies belonging to the genus *Belvosia*. By J. M. Aldrich. Art. 8, pp. 1-45. May 17, 1928.

2730. The scorpions of the western part of the United States, with notes on those occurring in northern Mexico. By H. E. Ewing. Art. 9, pp. 1-24, 1 fig., 2 pls. May 24, 1928.

2731. New Vicksburg (Oligocene) mollusks from Mexico. By C. Wythe Cooke. Art. 10, pp. 1-11, 2 pls. Apr. 24, 1928.

2732. A prehistoric pit house village site on the Columbia River at Wahluke, Grant County, Wash. By Herbert W. Krieger. Art. 11, pp. 1-29, 7 pls. May 17, 1928.

2733. A revision of the lizards of the genus *Ctenosaura*. By John Wendell Bailey. Art. 12, pp. 1-58, 30 pls. Sept. 26, 1928.

2734. Fossil nutlets of the genus *Lithospermum*. By Edward W. Berry. Art. 13, pp. 1-3, 1 pl. May 1, 1928.

2735. Fire-making apparatus in the United States National Museum. By Walter Hough. Art. 14, pp. 1-72, 56 figs., 11 pls. June 22, 1928.

2736. Contribution to the comparative anatomy of the eared and earless seals (genera *Zalophus* and *Phoca*). By A. Brazier Howell. Art. 15, pp. 1-142, 30 figs., 1 pl. Jan. 26, 1929.

2737. Zeolites from Ritter Hot Spring, Grant County, Oregon. By D. F. Hewett, Earl V. Shannon, and Forest A. Gonyer. Art. 16, pp. 1-18, 1 fig., 2 pls. June 12, 1928.

Proc. No.

2738. Field notes on vertebrates collected by the Smithsonian-Chrysler East African Expedition of 1926. By Arthur Loveridge. Art. 17, pp. 1-69, 4 pls. June 20, 1928.

2739. Two new species of commensal copepods from the Woods Hole region. By H. R. Seiwell. Art. 18, pp. 1-5, 2 pls. June 4, 1928.

2740. New moths of the family Ceruridae (Notodontidae) in the United States National Museum. By William Schaus. Art. 19, pp. 1-90. June 27, 1928.

2741. The Florida tree snails of the genus *Liguus*. By Charles Torrey Simpson. Art. 20, pp. 1-44, 1 fig., 4 pls. May 11, 1929.

2742. Concerning the origin of the metal in meteorites. By George P. Merrill. Art. 21, pp. 1-7, 3 pls. June 20, 1928.

2743. Tertiary fossil plants from the Argentine Republic. By Edward W. Berry. Art. 22, pp. 1-27, 1 fig., 5 pls. Oct. 17, 1828.

2744. Notes on American two-winged flies of the family Sapromyzidae. By J. R. Malloch. Art. 23, pp. 1-18, 5 figs. June 23, 1928.

2745. A new pterosaurian reptile from the marine Cretaceous of Oregon. By Charles W. Gilmore. Art. 24, pp. 1-5, 2 figs. June 25, 1928.

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Proceedings of the United States National Museum, vol. 74. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); arts. 1-26 (Proceedings papers 2746-2771, paged separately). 1929.

2746. New Diptera or two-winged flies from South America. By J. M. Aldrich. Art. 1, pp. 1-25, 2 figs. Dec. 1, 1928.

2747. Three new species of two-winged flies of the family Bombyliidae from India. By J. M. Aldrich. Art. 2, pp. 1-3. Oct. 26, 1928.

2748. New fossil pearly fresh-water mussels from deposits on the upper Amazon of Peru. By William B. Marshall. Art. 3, pp. 1-7, 1 pl. Oct. 31, 1928.

2749. Two new nematode worms from rodents. By Emmett W. Price. Art. 4, pp. 1-5, 2 pls. Nov. 10, 1928.

2750. Fossil footprints from the Fort Union (Paleocene) of Montana. By Charles W. Gilmore. Art. 5, pp. 1-4, 1 fig., 3 pls. Oct. 6, 1928.

2751. Notes on some Oriental sapromyzid flies (Diptera), with particular reference to the Philippine species. By J. R. Malloch. Art. 6, pp. 1-97, 6 pls. Apr. 24, 1929.

2752. A revision of the wood-warbler genus *Basileuterus* and its allies. By W. E. Clyde Todd. Art. 7, pp. 1-95, 1 fig. Apr. 26, 1929.

2753. Five new parasitic flies reared from beetles in China and India. By J. M. Aldrich. Art. 8, pp. 1-7. Oct. 19, 1928.

2754. *Moniezia,* a genus of cestode worms and the proposed reduction of its species to three. By E. Leonard Taylor. Art. 9, pp. 1-9, 5 pls. Nov. 24, 1928.

2755. Tropical American Diptera or two-winged flies of the family Dolichopodidae from Central and South America. By M. C. Van Duzee. Art. 10, pp. 1-64, 2 pls. Feb. 9, 1929.

2756. Synopsis and description of North American tadpoles. By A. H. Wright. Art. 11, pp. 1-70, 9 pls. June 4, 1929.

2757. A new polychaetous annelid of the genus *Phyllodoce* from the west coast of Costa Rica. By Aaron L. Treadwell. Art. 12, pp. 1-3, 3 figs. Nov. 10, 1928.

2758. Tschermigite, ammoniojarosite, epsomite, celestite, and paligorskite from southern Utah. By Earl V. Shannon. Art. 13, pp. 1-12, 1 fig. Jan. 31, 1929.

2759. New fossil mollusks from the Miocene of Virginia and North Carolina, with a brief outline of the divisions of the Chesapeake group. By Wendell C. Mansfield. Art. 14, pp. 1-11, 5 pls. Jan. 14, 1929.

2760. The fossil crinoid genus *Vasocrinus* Lyon. By Edwin Kirk. Art. 15, pp. 1-16, 2 pls. Jan. 29, 1929.

2761. A revision of the North American ichneumon-flies of the genus *Mesostenus* and related genera. By R. A. Cushman. Art. 16, pp. 1-58, 8 figs. Feb. 20, 1929.

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2762. New fresh-water and marine bivalve shells from Brazil and Uruguay. By William B. Marshall. Art. 17, pp. 1-7, 4 pls. Oct. 26, 1928.

2763. *Bathmopterus,* a new fossil gasteropod genus from the Silurian of Alaska. By Edwin Kirk. Art. 18, pp. 1-4, 1 pl. Dec. 13, 1928.

2764. Further studies of types of American muscoid flies in the collection of the Vienna Natural History Museum. By J. M. Aldrich. Art. 19, pp. 1-34, 2 figs. Feb. 25, 1929.

2765. A new species of trichostrongylid worm of the genus *Cooperia* from the Carabao in the Philippine Islands, with a review of the genus. By Benjamin Schwartz. Art. 20, pp. 1-5, 1 fig., 1 pl. Nov. 27, 1928.

2766. Miargyrite silver ore from the Randsburg district, California. By Earl V. Shannon. Art. 21, pp. 1-10, 3 figs. Jan. 31, 1929.

2767. Two new frogs from Jamaica. By Emmett Reid Dunn. Art. 22, pp. 1-2. Dec. 18, 1928.

2768. Mineralogy and geology of Cerro Mercado, Durango, Mexico. By William F. Foshag. Art. 23, pp. 1-27, 3 figs., 4 pls. Feb. 20, 1929.

2769. Notes and new species of American moths of the genus *Scoparia* Haworth. By Harrison G. Dyar. Art. 24, pp. 1-9. Jan. 31, 1929.

2770. A new salamander from southern California. By Emmett Reid Dunn. Art. 25, pp. 1-3. Jan. 31, 1929.

2771. The gums of the porpoise *Phocoenoides dalli* (True). By Gerrit S. Miller, Jr. Art. 26, pp. 1-4, 4 pls. Jan. 26, 1929.

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Proceedings of the United States National Museum, vol. 75. Pp. i-xiii (title page, advertisement, table of contents, and list of illustrations); arts. 1-26 (Proceedings papers 2772-2797, paged separately). 1929.

2772. Mammals from China in the collections of the United States National Museum. By A. Brazier Howell. Art. 1, pp. 1-82, 10 pls. June 7, 1929.

2773. Beetle larvae of the subfamily Galerucinae. By Adam G. Böving. Art. 2, pp. 1-48, 3 figs., 5 pls. Apr. 13, 1929.

2774. On some new and interesting species of water beetles of the family Gyrinidae in the United States National Museum. By Georg Ochs. Art. 3, pp. 1-6. Jan. 31, 1929.

2775. A review of the birds of the islands of Siberut and Sipora, Mentawi group (Spolia Mentawiensia). By J. H. Riley. Art. 4, pp. 1-45, 1 pl. Apr. 6, 1929.

2776. A generic revision of the fossorial wasps of the tribes Stizini and Bembicini, with notes and descriptions of new species. By John Bernard Parker. Art. 5, pp. 1-203, 15 pls. June 7, 1929.

2777. Some new genera and species of nematode worms, Filarioidea, from animals dying in the Calcutta Zoological Garden. By Asa C. Chandler. Art. 6, pp. 1-10, 3 pls. Apr. 6, 1929.

2778. A revision of the American two-winged flies of the psychodid subfamily Bruchomyinae. By Charles P. Alexander. Art. 7, pp. 1-9, 2 figs. Mar. 21, 1929.

2779. Notes on some North American moths of the subfamily Eucosminae. By Carl Heinrich. Art. 8, pp. 1-23, 5 pls. Apr. 5, 1929.

2780. Recent Foraminifera from off Juan Fernandez Islands. By Joseph A. Cushman and R. T. D. Wickenden. Art. 9, pp. 1-16, 6 pls. Apr. 16, 1929.

2781. A summary of the earthworm fauna of Burma with descriptions of fourteen new species. By G. E. Gates. Art. 10, pp. 1-41, 24 figs. June 28, 1929.

2782. A contribution to our knowledge of the anatomy of the fresh-water mussels of the District of Columbia. By Lucy Reardon. Art. 11, pp. 1-12, 5 pls. Apr. 22, 1929.

2783. A new liver fluke from a monkey and new parasitic roundworms from various African animals. By J. H. Sandground. Art. 12, pp. 1-11, 2 pls. June 10, 1929.

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Proc. No.

2784. Bugs of the family Miridae of the District of Columbia and vicinity. By H. H. Knight and W. L. McAtee. Art. 13, pp. 1-27. June 8, 1929.

2785. Distribution and key of the North American copepods of the genus *Diaptomus*, with the description of a new species. By C. Dwight Marsh. Art. 14, pp. 1-27, 16 figs. June 28, 1929.

2786. A new crab from the Eocene of Florida. By Mary J. Rathbun. Art. 15, pp. 1-4, 3 pls. May 6, 1929.

2787. A newly found meteoric stone reported by W. B. Lang from Peck's Spring, Midland County, Tex. By George P. Merrill. Art. 16, pp. 1-2, 1 pl. May 6, 1929.

2788. A new nematode, *Sincosta aberrans*, new genus and new species from a rodent. By Glenwood C. Roe. Art. 17, pp. 1-3, 1 pl. May 11, 1929.

2789. A synopsis of the trematode family Schistosomidae, with descriptions of new genera and species. By Emmett W. Price. Art. 18, pp. 1-39, 15 pls. June 28, 1929.

2790. A revision of the beetles of the tenebrionid tribe Usechini, with descriptions of a new genus and new species. By Frank E. Blaisdell, Sr. Art. 19, pp. 1-14, 2 figs., 1 pl. Sept. 25, 1929.

2791. Tapeworms of the genera *Rhabdometra* and *Paruterina* found in the quail and yellow-billed cuckoo. By Myrna F. Jones. Art. 20, pp. 1-8, 1 pl. June 13, 1929.

2792. A new species of the trematode worms belonging to the genus *Hasstilesia* from rabbits in Texas. By Asa C. Chandler. Art. 21, pp. 1-5, 4 figs. June 7, 1929.

2793. *Pagecrinus*, a new crinoid genus from the American Devonian. By Edwin Kirk. Art. 23, pp. 1-4, 1 pl. June 7, 1929.

2794. A new species of mosquito from Montana, with annotated list of the species known from the State. By Harrison G. Dyar. Art. 23, pp. 1-8. June 7, 1929.

2795. Tertiary fossil plants from Colombia, South America. By Edward W. Berry. Art. 24, pp. 1-12, 5 pls. June 14, 1929.

2796. Recent Foraminifera from the west coast of South America. By Joseph A. Cushman and Betty Kellett. Art. 25, pp. 1-16, 5 pls. June 19, 1929.

2797. Two new species of polychaetous annelids from the Argentine coast. By A. L. Treadwell. Art. 26, pp. 1-5, 6 figs. June 7, 1929.

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Proceedings of the United States National Museum, vol. 76. Pp. i-xiv (title page, advertisement, table of contents, and list of illustrations); arts. 1-26 (Proceedings papers 2798-2823, paged separately). 1930.

2798. New fossil land and fresh-water mollusks from the Reynosa formation of Texas. By William B. Marshall. Art. 1, pp. 1-6, 1 pl. June 10, 1929.

2799. A revision of the two-winged flies of the genus *Procecidochares* in North America, with an allied new genus. By J. M. Aldrich. Art. 2, pp. 1-13. June 7, 1929.

2800. Descriptions of new species of Foraminifera of the genus *Discocyclina* from the Eocene of Mexico. By Thomas Wayland Vaughan. Art. 3, pp. 1-18, 7 pls. June 10, 1929.

2801. North American species of the weevils of the otiorhynchid genus *Mesagroicus*. By L. L. Buchanan. Art. 4, pp. 1-14, 1 fig., 2 pls. June 27, 1929.

2802. Three new land shells of the genus *Oreohelix* from Arizona. By William B. Marshall. Art. 5, pp. 1-3, 1 pl. Oct. 10, 1929.

2803. New species of buprestid beetles from Costa Rica. By W. S. Fisher. Art. 6, pp. 1-20. Oct. 22, 1929.

2804. *Briarosaccus callosus*, a new genus and new species of a rhizocephalan parasite of *Lithodes agassizii* Smith. By H. Boschma. Art. 7, pp. 1-8, 8 figs. Mar. 13, 1930.

2805. A new variety of the hexactinellid sponge, *Rhabdocalyptus dawsoni* (Lambe) and the species of *Rhabdocalyptus*. By H. V. Wilson and J. T. Penney. Art. 8, pp. 1-9, 2 pls. Feb. 5, 1930.

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2806. New Lower and Middle Cambrian Crustacea. By Charles E. Resser. Art. 9, pp. 1-18, 7 pls. Dec. 27, 1929.

2807. Notes on the species of myctophine fishes represented by type specimens in the United States National Museum. By Albert Eide Parr. Art. 10, pp. 1-47, 21 figs. Dec. 27, 1929.

2808. Revision of the two-winged flies of the genus *Coelopa* Meigen in North America. By J. M. Aldrich. Art. 11, pp. 1-6. Nov. 16, 1929.

2809. Two new species of trematodes of the genus *Parametorchis* from fur-bearing animals. By Emmett W. Price. Art. 12, pp. 1-5, 2 figs. Nov. 19, 1929.

2810. The bryozoan fauna of the Galapagos Islands. By Ferdinand Canu and R. S. Bassler. Art. 13, pp. 1-78, 13 figs., 14 pls. Jan. 20, 1930.

2811. The Middle Devonian Traverse group of rocks in Michigan, a summary of existing knowledge. By Erwin R. Pohl. Art. 4, pp. 1-34, 2 pls. Jan. 10, 1930.

2812. New genera and species of muscoid flies. By J. M. Aldrich. Art. 15, pp. 1-13. Nov. 16, 1929.

2813. Oölites or cave pearls in the Carlsbad Caverns. By Frank L. Hess. Art. 16, pp. 1-5, 8 pls. Oct. 28, 1929.

2814. Contribution to the taxonomy of Asiatic wasps of the genus *Tiphia* (Scoliidae). By H. W. Allen and H. A. Jaynes. Art. 17, pp. 1-105, 1 fig., 4 pls. Mar. 5, 1930.

2815. Two new mollusks of the genera *Ostrea* and *Exogyra* from the Austin chalk, Texas. By Lloyd W. Stephenson. Art. 18, pp. 1-6, 3 pls. Dec. 23, 1929.

2816. The Foraminifera of the Ripley formation on Coon Creek, Tennessee. By Willard Berry and Louis Kelley. Art. 19, pp. 1-20, 3 pls. Dec. 19, 1929.

2817. Notes on the muscoid flies of the genera *Opelousia* and *Opsodexia* with the description of three new species. By H. J. Reinhard. Art. 20, pp. 1-9. Nov. 27, 1929.

2818. Ordovician trilobites of the family Telephidae and concerned stratigraphic correlations. By E. O. Ulrich. Art. 21, pp. 1-101, 8 pls. Feb. 4, 1930.

2819. *Mitrospira,* a new Ordovician gasteropod genus. By Edwin Kirk. Art. 22, pp. 1-6, 3 pls. Jan. 8, 1930.

2820. A new fossil coral from the Cretaceous of Texas. By J. Edward Hoffmeister. Art. 23, pp. 1-3, 2 pls. Dec. 21, 1929.

2821. A systematic classification for the birds of the world. By Alexander Wetmore. Art. 24, pp. 1-8. Jan. 8, 1930.

2822. New species of ichneumon-flies and taxonomic notes. By R. A. Cushman. Art. 25, pp. 1-18. Jan. 6, 1930.

2823. A nearly complete carapace of a fossil turtle, *Amyda virginiana* (Clark). By W. Gardner Lynn. Art. 26, pp. 1-4, 2 pls. Dec. 23, 1929.

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Proceedings of the United States National Museum, vol. 77. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); arts. 1-20 (Proceedings papers 2824-2843, paged separately). 1931.

2824. Two new species of trematode worms of the genus *Eucotyle* from North American birds. By Emmett W. Price. Art. 1, pp. 1-4, 2 figs. Jan. 18, 1930.

2825. New land and fresh-water mollusks from South America. By William B. Marshall. Art. 2, pp. 1-7, 2 pls. Jan. 25, 1930.

2826. A revision of the North American species of ichneumon-flies of the genus *Odontomerus.* By R. A. Cushman. Art. 3, pp. 1-15, 4 figs. Feb. 4, 1930.

2827. The lysianassid amphipod crustaceans of Newfoundland, Nova Scotia, and New Brunswick in the United States National Museum. By Clarence R. Shoemaker. Art. 4, pp. 1-19, 10 figs. Mar. 3, 1930.

2828. The excavation and repair of Betatakin. By Neil Merton Judd. Art. 5, pp. 1-77, 28 figs., 46 pls. Sept. 2, 1930.

2829. A monograph of the foraminiferal family Polymorphinidae, Recent and fossil. By Joseph A. Cushman and Yoshiaki Ozawa. Art. 6, pp. 1-195, 2 figs., 40 pls. Aug. 29, 1930.

Proc. No.

2830. The caudal molt of certain coraciiform, coliiform, and piciform birds. By Herbert Friedmann. Art. 7, pp. 1-6. Mar. 13, 1930.

2831. Synonymical and descriptive notes on parasitic Hymenoptera. By A. B. Gahan. Art. 8, pp. 1-12. Apr. 9, 1930.

2832. Three new genera and five new species of parasitic Crustacea. By H. F. Nierstrasz and G. A. Brender à Brandis. Art. 9, pp. 1-9, 20 figs. Apr. 8, 1930.

2833. A nearly complete shell of the extinct turtle, *Trachemys sculpta*. By Charles W. Gilmore. Art. 10, pp. 1-8, 2 figs., 3 pls. Apr. 8, 1930.

2834. The herpetological collections made by Dr. Hugh M. Smith in Siam from 1923 to 1929. By Doris M. Cochran. Art. 11, pp. 1-39, 6 figs. Apr. 30, 1930.

2835. Birds from the small islands off the northeast coast of Dutch Borneo. By J. H. Riley. Art. 12, pp. 1-23, 1 pl. Oct. 21, 1930.

2836. Some peculiar spiral fossil forms from California and Mexico. By Wendell C. Mansfield. Art. 13, pp. 1-3, 2 pls. Oct. 22, 1930.

2937. New forms of sphecoid wasps of the genus *Didineis* Wesmael. By J. R. Malloch and S. A. Rohwer. Art. 14, pp. 1-7, 8 figs. Oct. 22, 1930.

2838. Birds collected in Inner Mongolia, Kansu, and Chihli by the National Geographic Society's Central-China Expedition under the direction of F. R. Wulsin. By J. H. Riley. Art. 15, pp. 1-39. Oct. 29, 1930.

2839. On dinosaurian reptiles from the Two Medicine formaton of Montana. By Charles W. Gilmore. Art. 16, pp. 1-39, 18 figs., 10 pls. Nov. 20, 1930.

2840. Studies of the North American weevils belonging to the superfamily Platystomoidea. By W. Dwight Pierce. Art. 17, pp. 1-34, 5 pls. Dec. 10, 1930.

2841. New species of North American weevils of the genus *Lixus*. By F. H. Chittenden. Art. 18, pp. 1-25, 1 pl. Nov. 15, 1930.

2842. Notes on the rhinotragine beetles of the family Cerambycidae, with descriptions of new species. By W. S. Fisher. Art. 19, pp. 1-20. Oct. 15, 1930.

2843. The taxonomy and host relationships of the biting lice of the genera *Dennyus* and *Eureum*, including the descriptions of a new genus, subgenus, and four new species. By H. E. Ewing. Art. 20, pp. 1-16, 7 figs. Oct. 15, 1930.

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Proceedings of the United States National Museum, vol. 78. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); arts. 1-23 (Proceedings papers 2844-2866, paged separately). 1931.

2844. New two-winged flies of the family Calliphoridae from China. By J. M. Aldrich. Art. 1, pp. 1-5, 3 figs. Sept. 25, 1930.

2845. Catalogue of human crania in the United States National Museum collections: Pueblos, southern Utah Basket-makers, Navaho. By Aleš Hrdlička. Art. 2, pp. 1-95. Apr. 9, 1931.

2846. A new species of trematode worm of the genus *Ornithobilharzia* from a Canadian goose. By Rudolf Wetzel. Art. 3, pp. 1-4, 1 pl. Oct. 25, 1930.

2847. Cambrian bivalved Crustacea of the order Conchostraca. By E. O. Ulrich and R. S. Bassler. Art. 4, pp. 1-130, 10 pls. Apr. 13, 1931.

2848. New and old land shells from the island of Luzon, Philippines. By Paul Bartsch. Art. 5, pp. 1-20, 9 pls. Nov. 25, 1930.

2849. The South American lizards in the collection of the United States National Museum. By Charles E. Burt and May Danheim Burt. Art. 6, pp. 1-52. Nov. 25, 1930.

2850. A revision of the species of *Coccophagus*, a genus of hymenopterous, coccid-inhabiting parasites. By Harold Compere. Art. 7, pp. 1-132, 14 pls. Mar. 12, 1931.

2851. Fossil decapod crustaceans from Mexico. By Mary J. Rathbun. Art. 8, pp. 1-10, 6 pls. Nov. 1, 1930.

2852. American two-winged flies of the genus *Stylogaster* Macquart. By J. M. Aldrich. Art. 9, pp. 1-27. Oct. 15, 1930.

2853. A revision of the North American tachinid flies of the genus *Achaetoneura*. By R. T. Webber. Art. 10, pp. 1-37, 14 figs. Dec. 10, 1930.

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2854. Restudy of some Burgess shale fossils. By George Evelyn Hutchinson. Art. 11, pp. 1-24, 5 figs., 1 pl. Nov. 4, 1930.

2855. Notes on the types of American two-winged flies of the genus *Sarcophaga* and a few related forms, described by the early authors. By J. M. Aldrich. Art. 12, pp. 1-39, 3 pls. Nov. 5, 1930.

2856. Exploration of ruins in the White Mountain Apache Indian Reservation, Arizona. By Walter Hough. Art. 13, pp. 1-21, 9 figs., 10 pls. Oct. 25, 1930.

2857. Notes on ichneumon-flies of the genus *Polycyrtus* with descriptions of new species. By R. A. Cushman. Art. 14, pp. 1-62. Mar. 31, 1931.

2858. Notes on some acalyptrate flies in the United States National Museum. By John R. Malloch. Art. 15, pp. 1-32, 10 figs. Jan. 10, 1931.

2859. Report on the South American sea stars collected by Waldo L. Schmitt. By W. K. Fisher. Art. 16, pp. 1-10, 2 figs., 8 pls. Apr. 7, 1931.

2860. Mollusks from the Aspen shale (Cretaceous) of southwestern Wyoming. By John B. Reeside, Jr., and A. Allen Weymouth. Art. 17, pp. 1-24, 4 pls. Feb. 26, 1931.

2861. A new species of amphipod crustacean (Acanthonotozomatidae) from California, and notes on *Eurystheus tenuicornis*. By Clarence R. Shoemaker. Art. 18, pp. 1-8, 4 figs. Mar. 11, 1931.

2862. Notes on the American bats of the genus *Tadarida*. By H. Harold Shamel. Art. 19, pp. 1-27. May 6, 1931.

2863. A new parasitic fly of the genus *Chaetophlepsis*. By R. T. Webber. Art. 20, pp. 1-4. Mar. 26, 1931.

2864. Description of a new species of amidostomine worm of the genus *Epomidiostomum* from the gizzard of anserine birds. By Rudolf Wetzel. Art. 21, pp. 1-10, 2 pls. Mar. 19, 1931.

2865. Redescription of two species of trematode worms from the MacCallum collection, with a note on the family Pronocephalidae. By Emmett W. Price. Art. 22, pp. 1-10, 2 figs. Mar. 11, 1931.

2866. New genera and species of nematode worms. By Asa C. Chandler. Art. 23, pp. 1-11, 2 pls. Mar. 11, 1931.

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Proceedings of the United States National Museum, vol. 79. Pp. i-xvi (title page, advertisement, table of contents, and list of illustrations); arts. 1-34 (Proceedings papers 2867-2900, paged separately). 1932.

2867. Three new species of polychaetous annelids from Chesapeake Bay. By Aaron L. Treadwell. Art. 1, pp. 1-5, 3 figs. July 21, 1931.

2868. Revision of the species of beetles of the genus *Trirhabda* north of Mexico. By Doris Holmes Blake. Art. 2, pp. 1-36, 2 pls. July 24, 1931.

2869. A new species of nematode worm from the sage grouse. By Everett E. Wehr. Art. 3, pp. 1-3, 3 figs. June 24, 1931.

2870. Four new species of trematode worms from the muskrat, *Ondatra zibethica*, with a key to the trematode parasites of the muskrat. By Emmett W. Price. Art. 4, pp. 1-13, 4 figs. July 10, 1931.

2871. Description of a new genus and species of nematode worm occurring in the northwestern belted kingfisher, with a key to the genera of the subfamily Acuariinae. By Everett E. Wehr. Art. 5, pp. 1-4, 5 figs. June 20, 1931.

2872. Two new species of nematode worms of the genus *Ostertagia* from the Virginia deer, with a note on *Ostertagia lyrata*. By G. Dikmans. Art. 6, pp. 1-6, 1 fig., 2 pls. July 25, 1931.

2873. Descriptions of new genera and species of Siamese fishes. By Hugh M. Smith. Art. 7, pp. 1-48, 22 figs., 1 pl. Mar. 26, 1931.

2874. A new shipworm from Venezuela. By Paul Bartsch. Art. 8, pp. 1-3, 1 pl. Apr. 7, 1931.

2875. A new species of troödont dinosaur from the Lance formation of Wyoming. By Charles W. Gilmore. Art. 9, pp. 1-6, 5 pls. June 1, 1931.

2876. Report on birds recorded by the Pinchot Expedition of 1929 to the Caribbean and Pacific. By Albert K. Fisher and Alexander Wetmore. Art. 10, pp. 1-66, 10 pls. Aug. 29, 1931.

2877. The two-winged flies belonging to *Siphosturmia* and allied genera, with descriptions of two new species. By H. J. Reinhard. Art. 11, pp. 1-11. July 30, 1931.

2878. A new pearl oyster from the Hawaiian Islands. By Paul Bartsch. Art. 12, pp. 1-2, 2 pls. June 2, 1931.

2879. Notes on and descriptions of some American moths. By Carl Heinrich. Art. 13, pp. 1-16, 1 fig., 7 pls. Aug. 10, 1931.

2880. Descriptions of thirteen new American and Asiatic ichneumon-flies, with taxonomic notes. By R. A. Cushman. Art. 14, pp. 1-16. Aug. 1, 1931.

2881. Descriptions of new marine mollusks from Panama, with a figure of the genotype of *Engina*. By Paul Bartsch. Art. 15, pp. 1-10, 1 pl. Aug. 1, 1931.

2882. Descriptions of a new genus and eight new species of ichneumon-flies, with taxonomic notes. By C. F. W. Muesebeck. Art. 16, pp. 1-16, 1 fig. Aug. 14, 1931.

2883. A new species of trematode of the family Heterophyidae, with a note on the genus *Apophallus* and related genera. By Emmett W. Price. Art. 17, pp. 1-6, 1 fig. Sept. 21, 1931.

2884. Two new lungworms from North America ruminants and a note on the lungworms of sheep in the United States. By G. Dikmans. Art. 18, pp. 1-4, 2 pls. Aug. 29, 1931.

2885. A new genus and new species of trematode worms of the family Plagiorchiidae. By John T. Lucker. Art. 19, pp. 1-8, 1 pl. Aug. 29, 1931.

2886. Revision of the American parasitic flies belonging to the genus *Winthemia*. By H. J. Reinhard. Art. 20, pp. 1-54, 1 pl. Nov. 24, 1931.

2887. Some Tertiary mollusks from southern Florida. By W. C. Mansfield. Art. 21, pp. 1-12, 4 pls. Oct. 9, 1931.

2888. The stegocephalid and ampeliscid amphipod crustaceans of Newfoundland, Nova Scotia, and New Brunswick in the United States National Museum. By Clarence R. Shoemaker. Art. 22, pp. 1-18, 6 figs. Oct. 16, 1931.

2889. *Anodontites:* A genus of South and Central American and Mexican pearly fresh-water mussels. By William B. Marshall. Art. 23, pp. 1-16, 2 pls. Oct. 8, 1931.

2890. Three new parasitic nematode worms. By Mary Scott Skinker. Art. 24, pp. 1-9, 19 figs. Nov. 10, 1931.

2891. Report on a collection of insects of the order Trichoptera from Siam and China. By A. B. Martynov. Art. 25, pp. 1-20, 4 pls. Nov. 5, 1931.

2892. Four new species of trematode worms of the subfamily Onchocotylinae. By G. A. MacCallum. Art. 26, pp. 1-8, 1 fig., 1 pl. Dec. 5, 1931.

2893. Some new Middle Cambrian fossils from British Columbia. By Rudolf Ruedemann. Art. 27, pp. 1-18, 6 figs., 7 pls. Nov. 27, 1931.

2894. Revision of the chalcid flies of the tribe Decatomini (Eurytomidae) in America north of Mexico. By W. V. Balduf. Art. 28, pp. 1-95, 4 pls. May 19, 1932.

2895. The buffalo motive in Middle Celebes decorative design. By Walter Hough. Art. 29, pp. 1-8, 9 pls. Feb. 11, 1932.

2896. Design areas in Oceania based on specimens in the United States National Museum. By Herbert W. Krieger. Art. 30, pp. 1-53, 33 pls. Apr. 21, 1932.

2897. A new nematode worm, *Viannaia bursobscura*, from the opossum, with a note on other parasites of the opossum. By G. Dikmans. Art. 31, pp. 1-4, 2 pls. Nov. 30, 1931.

2898. Excavations at a prehistoric Indian village site in Mississippi. By Henry B. Collins, Jr. Art. 32, pp. 1-22, 3 figs., 13 pls. Feb. 25, 1931.

2899. A new Middle Cambrian merostome crustacean. By Charles Elmer Resser. Art. 33, pp. 1-4, 1 pl. Dec. 30, 1931.

2900. Flies of the genus *Pseudotephritis* Johnson (Diptera: Ortalidae). By John R. Malloch. Art. 34, pp. 1-6. Oct. 21, 1931.

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Proc. No.

2901. Observations on the growth rate of the foot in the mound birds of the genus *Megapodius*. By Herbert Friedmann. Art. 1, pp. 1-4. Oct. 28, 1931.

2902. Three new species of polychaetous annelids in the collections of the United State National Museum. By Aaron L. Treadwell. Art. 2, pp. 1-5, 3 figs. Nov. 10, 1931.

2903. Recent Foraminifera from the Atlantic coast of South America. By Joseph A. Cushman and Frances L. Parker. Art. 3, pp. 1-24, 4 pls. Nov. 19, 1931.

2904. The North American beetles of the genus *Coccinella*. By Th. Dobzhansky. Art. 4, pp. 1-32, 30 figs. Nov. 10, 1930.

2905. Echinoderms from the islands of Niuafoou and Nukualofa, Tonga Archipelago, with the description of a new genus and two new species. By Austin H. Clark. Art. 5, pp. 1-12, 8 pls. Jan. 30, 1932.

2906. The fishes obtained by the Pinchot South Seas Expedition of 1929, with description of one new genus and three new species. By Henry W. Fowler. Art. 6, pp. 1-16, 4 figs. Feb. 16, 1932.

2907. A second collection of birds from the provinces of Yunnan and Szechwan, China, made for the National Geographic Society by Dr. Joseph F. Rock. By J. H. Riley. Art. 7, pp. 1-91. Dec. 31, 1931.

2908. A catalogue of the Trombiculinae, or chigger mites, of the New World, with new genera and species and a key to the genera. By H. E. Ewing. Art. 8, pp. 1-19, 3 pls. Nov. 19, 1931.

2909. The west American mollusks of the genus *Acar*. By Paul Bartsch. Art. 9, pp. 1-4, 1 pl. Nov. 23, 1931.

2910. Notes on Francis Walker's types of North American flies of the family Tachinidae. By J. M. Aldrich. Art. 10, pp. 1-16. Nov. 10, 1931.

2911. North American two-winged flies of the genus *Spathimeigenia*, with descriptions of five new species. By J. M. Aldrich. Art. 11, pp. 1-10. Dec. 31, 1931.

2912. The birds of St. Lawrence Island, Bering Sea. By Herbert Friedmann. Art. 12, pp. 1-31, 2 figs., 6 pls. Feb. 13, 1932.

2913. The brachial flexor muscles in primates. By A. Brazier Howell and William L. Straus, Jr. Art. 13, pp. 1-31, 2 pls. Nov. 21, 1931.

2914. Upper Cretaceous Foraminifera from Trinidad. By Joseph A. Cushman and P. W. Jarvis. Art. 14, pp. 1-60, 16 pls. Mar. 10, 1932.

2915. The copepod crustaceans of Chesapeake Bay. By Charles Branch Wilson. Art. 15, pp. 1-54, 1 fig., 5 pls. Mar. 31, 1932.

2916. The ancient caves of Szechwan Province, China. By David Crockett Graham. Art. 16, pp. 1-13, 14 figs., 16 pls. Mar. 23, 1932.

2917. A new marine shell of the genus *Xenophora* from Florida. By Paul Bartsch. Art. 17, pp. 1-2, 1 pl. Dec. 31, 1931.

2918. The parasitic habit in the ducks, a theoretical consideration. By Herbert Friedmann. Art. 18, pp. 1-7. Mar. 4, 1932.

2919. A review of the nematodes of the genus *Hastospiculum*, with descriptions of two new species. By B. G. Chitwood. Art. 9, pp. 1-9, 3 pls. Apr. 28, 1932.

2920. Records of dipterous insects of the family Tachinidae reared by the late George Dimmock, with description of one new species and notes on the genus *Anetia* Robineau-Desvoidy. By J. M. Aldrich. Art. 20, pp. 1-8. Mar. 31, 1932.

2921. Insects of the order Orthoptera of the Pinchot Expedition of 1929. By A. N. Caudell. Art. 21, pp. 1-7. Aug. 10, 1932.

2922. New West Indian cerambycid beetles. By W. S. Fisher. Art. 22, pp. 1-93. June 7, 1932.

2923. Revision of the Nearctic ichneumon-flies belonging to the genus *Macrocentrus*. By C. F. W. Muesebeck. Art. 23, pp. 1-55. Aug. 3, 1932.

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Proceedings of the United States National Museum, vol. 81. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); arts. 1-18 (Proceedings papers 2924-2941, paged separately). 1933.

Proc. No.

2924. New bopyrid isopod crustaceans from Dry Tortugas, Florida. By A. S. Pearse. Art. 1, pp. 1-6, 26 figs. June 1, 1932.

2925. Birds collected in Cuba and Haiti by the Parish-Smithsonian Expedition of 1930. By Alexander Wetmore. Art. 2, pp. 1-40, 7 pls. July 22, 1932.

2926. A new species of cestode, *Crepidobothrium amphiumae,* from *Amphiuma tridactylum.* By Clarke Courson Zeliff. Art. 3, pp. 1-3, 1 pl. June 18, 1932.

2927. The marine and fresh-water sponges of California. By M. W. de Laubenfels. Art. 4, pp. 1-140, 79 figs. Dec. 2, 1932.

2928. A new trematode of the genus *Urotrema* from bats. By Joseph E. Alicata. Art. 5, pp. 1-4, 1 fig. Aug. 11, 1932.

2929. A newly discovered West Indian mollusk faunula. By Paul Bartsch. Art. 6, pp. 1-12, 3 pls. July 6, 1932.

2930. Decorative designs on Elden Pueblo pottery, Flagstaff, Ariz. By Walter Hough. Art. 7, pp. 1-11, 1 fig., 10 pls. July 20, 1932.

2931. The fishes obtained by Lieut. H. C. Kellers, of the United States Naval Eclipse Expedition of 1930, at Niuafoou Island, Tonga Group, in Oceania. By Henry W. Fowler. Art. 8, pp. 1-9, 3 figs. Aug. 15, 1932.

2932. New Diptera, or two-winged flies, from America, Asia, and Java, with additional notes. By J. M. Aldrich. Art. 9, pp. 1-28, 2 figs., 1 pl. June 30, 1932.

2933. A cache of Basket Maker baskets from New Mexico. By Walter Hough. Art. 10, pp. 1-3, 3 pls. June 25, 1932.

2934. The forms of the common Old World swallowtail butterfly (*Papilio machaon*) in North America, with descriptions of two new subspecies. By Austin H. Clark. Art. 11, pp. 1-15, 8 pls. July 12, 1932.

2935. Report on the hexactinellid sponges collected by the United States Fisheries steamer *Albatross* in the northwestern Pacific during the summer of 1906. By Yaichiro Okada. Art. 12, pp. 1-118, 16 figs., 6 pls. Oct. 19, 1932.

2936. The trematode parasites of marine mammals. By Emmett W. Price. Art. 13, pp. 1-68, 12 pls. Oct. 1, 1932.

2937. Two new land shells of the genus *Bulimulus* from Bolivia. By William B. Marshall. Art. 14, pp. 1-3, 1 pl. July 28, 1932.

2938. A Miocene mollusk of the genus *Haliotis* from the Tremblor Range, California. By W. P. Woodring. Art. 15, pp. 1-4, 1 pl. Aug. 30, 1932.

2939. Notes on the helminth paraistes of the opossum (*Didelphis virginiana*) in southeast Texas, with descriptions of four new species. By Asa C. Chandler. Art. 16, pp. 1-15, 5 figs. Aug. 15, 1932.

2940. The helminths parasitic in the Amphibia and Reptilia of Houston, Texas, and vicinity. By Paul D. Harwood. Art. 17, pp. 1-71, 5 pls. Dec. 21, 1932.

2941. On a newly mounted skeleton of *Diplodocus* in the United States National Museum. By Charles W. Gilmore. Art. 18, pp. 1-21, 3 figs., 6 pls. Nov. 18, 1932.

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Proceedings of the United States National Museum, vol. 82. Pp. i-xii (title page, advertisement, table of contents, and list of illustrations); arts. 1-30 (Proceedings papers 2942-2971, paged separately). 1934.

2942. A remarkable new genus and species of two-winged flies related to the Oestridae. By Charles H. T. Townsend. Art. 1, pp. 1-4, 2 figs. Oct. 11, 1932.

2943. A new Paleocene mammal from a deep well in Louisiana. By George Gaylord Simpson. Art. 2, pp. 1-4, 1 fig. Nov. 5, 1932.

2944. The Chinese lizards of the genus *Gekko.* By Leonhard Stejneger. Art. 3, pp. 1-8. Nov. 7, 1932.

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2945. Description of a tick, *Dermacentor halli,* from the Texas peccary, with a key to the North American species of *Dermacentor.* By Allen McIntosh. Art. 4, pp. 1-6, 1 fig., 1 pl. Oct. 26, 1932.

2946. New fossil fresh-water mollusks from Ecuador. By William B. Marshall and Edgar O. Bowles. Art. 5, pp. 1-7, 1 pl. Dec. 2, 1932.

2947. Two new nematodes, and notes on new findings of nematodes parasitic in Amphibia. By A. C. Walton. Art. 6, pp. 1-5, 1 fig. Mar. 1, 1933.

2948. A fossil rhinoceros (*Diceratherium armatum* Marsh) from Gallatin County, Montana. By Horace Elmer Wood, 2d. Art. 7, pp. 1-4, 3 pls. Mar. 13, 1933.

2949. New fresh-water gastropod mollusks of the genus *Chilina* of South America. By William B. Marshall. Art. 8, pp. 1-6, 1 pl. Mar. 1, 1933.

2950. A new species of extinct turtle from the Upper Pliocene of Idaho. By Charles W. Gilmore. Art. 9, pp. 1-7, 5 figs., 3 pls. Mar. 1, 1933.

2951. A collection of birds from Great Namaqualand, Southwest Africa. By Herbert Friedmann. Art. 10, pp. 1-12, 1 pl. Feb. 17, 1933.

2952. Five new species of North American ichneumon-flies. By Frank D. DeGant. Art. 11, pp. 1-6. Feb. 3, 1933.

2953. Fossil plants from the Aspen shale of southwestern Wyoming. By Roland W. Brown. Art. 12, pp. 1-10, 2 figs., 2 pls. Mar. 1, 1933.

2954. *Camptostroma,* a Lower Cambrian floating hydrozoan. By Rudolf Ruedemann. Art. 13, pp. 1-8, 2 figs., 4 pls. Mar. 1, 1933.

2955. Descriptions of new ichneumon-flies, with taxonomic notes. By R. A. Cushman. Art. 14, pp. 1-16. Mar. 1, 1933.

2956. Description of two parasitic nematodes from the Texas peccary. By Benjamin Schwartz and Joseph E. Alicata. Art. 15, pp. 1-6, 4 figs. Mar. 29, 1933.

2957. New termites from India. By Thomas E. Snyder. Art. 16, pp. 1-15, 8 figs., 1 pl. Apr. 28, 1933.

2958. A new nematode from the rhea. By Everett E. Wehr. Art. 17, pp. 1-5, 3 figs. Mar. 29, 1933.

2959. Synopsis of the calanoid crustaceans, exclusive of the Diaptomidae, found in fresh and brackish waters, chiefly of North America. By C. Dwight Marsh. Art. 18, pp. 1-58, 24 pls. June 30, 1933.

2960. West African snails of the family Achatinidae in the United States National Museum. By Henry A. Pilsbry. Art. 19, pp. 1-6, 2 pls. Apr. 28, 1933.

2961. Descriptions of new and imperfectly known species of genera of gobioid and pleuronectid fishes in the United States National Museum. By Isaac Ginsburg. Art. 20, pp. 1-23, 3 figs. May 19, 1933.

2962. *Crossochir koelzi*: A new Californian surf-fish of the family Embiotocidae. By Carl L. Hubbs. Art. 21, pp. 1-9, 1 pl. June 7, 1933.

2963. Pottery of the Hopewell type from Louisiana. By Frank M. Setzler. Art. 22, pp. 1-22, 6 figs., 7 pls. June 16, 1933.

2964. A new protozoan from the larva of the beetle *Osmoderma scabra.* By Clarke Courson Zeliff. Art. 23, pp. 1-3, 2 pls. July 19, 1933.

2965. A new fresh-water sponge from South Carolina. By James T. Penney. Art. 24, pp. 1-5, 9 figs. Sept. 8, 1933.

2966. Additional notes on the birds of Haiti and the Dominican Republic. By Alexander Wetmore and Frederick C. Lincoln. Art. 25, pp. 1-68, 6 pls. Dec. 4, 1933.

2967. Review of the wasps of the subfamily Pseninae of North America (Hymenoptera: Aculeata). By J. R. Malloch. Art. 26, pp. 1-60, 2 pls. Oct. 25, 1933.

2968. New species of buprestid beetles from Mexico and Central America. By W. S. Fisher. Art. 27, pp. 1-47. Dec. 4, 1933.

2969. Revision of the beetles of the genus *Disonycha* occurring in America north of Mexico. By Doris Holmes Blake. Art. 28, pp. 1-66, 8 pls. Dec. 4, 1933.

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2970. Three new chigger mites of the genus *Trombicula* from Panama, with a key to the known adults of *Trombicula* of the New World. By H. E. Ewing. Art. 29, pp. 1-6, 3 figs. Sept. 20, 1933.

2971. New genera and species of parasitic mites of the superfamily Parasitoidea. By H. E. Ewing. Art. 30, pp. 1-14, 4 pls. Sept. 25, 1933.

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2972. *Corynecrinus,* a new Devonian crinoid genus. By Edwin Kirk. Pp. 1-7, 1 pl. Oct. 8, 1934.

2973. American muscoid flies of the genera *Ceratomyiella* and *Paradidyma.* By H. J. Reinhard. Pp. 9-43. Dec. 28, 1934.

2974. Revision of the American two-winged flies belonging to the genus *Cuphocera.* By H. J. Reinhard. Pp. 45-70. Oct. 25, 1934.

2975. Some fossil corals from the West Indies. By John W. Wells. Pp. 71-110, 4 pls. Dec. 20, 1934.

2976. Fossil hares from the late Pliocene of southern Idaho. By C. Lewis Gazin. Pp. 111-121, 5 figs. Nov. 14, 1934.

2977. Parasites of fishes in Galveston Bay. By Asa C. Chandler. Pp. 123-157, 7 pls. June 13, 1935.

2978. On the Reptilia of the Kirtland formation of New Mexico, with descriptions of new species of fossil turtles. By Charles W. Gilmore. Pp. 159-188, 12 figs., 6 pls. June 27, 1935.

2979. New West Indian cerambycid beetles. By W. S. Fisher. Pp. 189-210. Sept. 9, 1935.

2980. Two new species of tapeworms from carnivores and a redescription of *Taenia laticollis* Rudolphi, 1819. By Mary Scott Skinker. Pp. 211-220, 3 pls. Oct. 25, 1935.

2981. New Paleocene mammals from the Fort Union of Montana. By George Gaylord Simpson. Pp. 221-244. Oct. 18, 1935.

2982. Five new genera and two new species of unstalked crinoids. By Austin H. Clark. Pp. 245-250. Mar. 14, 1936.

2983. Notes on the butterflies of the genus *Enodia* and description of a new fritillary from Peru. By Austin H. Clark. Pp. 251-259, 1 pl. Apr. 11, 1936.

2984. Polychaetous annelids from Amoy, China. By Aaron L. Treadwell. Pp. 261-279, 3 figs. June 10, 1936.

2985. A study of the fossil horse remains from the Upper Pliocene of Idaho. By C. Lewis Gazin. Pp. 281-320, 4 figs., 11 pls. June 1, 1936.

2986. A new genus and species of trematode from the little brown bat and a key to the genera of Pleurogenetinae. By Ralph W. Macy. Pp. 321-324, 1 fig. May 19, 1936.

2987. Two new cottid fishes from the western Pacific, with a revision of the genus *Stlengis* Jordan and Starks. By Rolf L. Bolin. Pp. 325-334, 2 figs., 1 pl. June 15, 1936.

2988. Tertiary plants from Venezuela. By Edward W. Berry. Pp. 335-360, 4 figs. June 12, 1936.

2989. Three new millipeds of the order Colobognatha from Tennessee, Texas, and Lower California, with records of previously known species. By H. F. Loomis. Pp. 361-368, 1 fig. May 11, 1936.

2990. A revision of the chalcid flies of the genus *Perilampus* Latreille occurring in America north of Mexico. By M. T. Smulyan. Pp. 369-412. Oct. 16, 1936

2991. Pycnogonids from Puget Sound. By Harriet I. Exline. Pp. 413-422, 2 fig July 9, 1936.

2992. California Crustacea of the order Cumacea. By Carl Zimmer. Pp. 423-439, 6 figs. Aug. 27, 1936.

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2993. A comparison of the shallow-water sponges near the Pacific end of the Panama Canal with those at the Caribbean end. By M. W. deLaubenfels. Pp. 441-466, 6 figs. July 31, 1936.

2994. New species of polychaetous annelids of the family Nereidae from California. By Olga Hartman. Pp. 467-480, 8 figs. July 11, 1936.

2995. Four new species of Chalcidoidea parasitic on cactus insects. By A. B. Gahan. Pp. 481-486. Aug. 7, 1936.

2996. New Tertiary Foraminifera of the genera *Operculina* and *Operculinoides* from North America and the West Indies. By Thomas Wayland Vaughan and W. Storrs Cole. Pp. 487-496, 4 pls. Oct. 8, 1936.

2997. Review of the seahorses (*Hippocampus*) found on the coasts of the American continents and of Europe. By Isaac Ginsburg. Pp. 497-594, 18 figs. Jan. 18, 1937.

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Proceedings of the United States National Museum, vol. 84. Pp. i-viii (title page, advertisement of contents, and list of illustrations); pp. 1-584 (Proceedings papers 2998-3026); pp. 585-606 (index); 34 figs., 20 pls. 1938.

2998. Report on the fishes collected by H. C. Raven in Lake Tanganyika in 1920. By George S. Myers. Pp. 1-15, 1 pl. Sept. 24, 1936.

2999. The ichneumon-flies of the genus *Brachycyrtus* Kriechbaumer. By R. A. Cushman. Pp. 17-24, 4 figs. Sept. 26, 1936.

3000. New cottid fishes from Japan and Bering Sea. By Rolf L. Bolin. Pp. 25-38, 4 figs. Oct. 10, 1936.

3001. Revision of the North American beetles of the staphylinid subfamily Tachyporinae—Part 1: Genus *Tachyporus* Gravenhorst. By Richard E. Blackwelder. Pp. 39-54. Nov. 17, 1936.

3002. Revision of the fishes of the family Microdesmidae, with description of a new species. By Earl D. Reid. Pp. 55-72, 4 figs., 1 pl. Dec. 10, 1936.

3003. Two new species of hawks from the Miocene of Nebraska. By Alexander Wetmore. Pp. 73-78, 2 figs. Nov. 3, 1936.

3004. A new North American mason-wasp from Virginia, with notes on some allied forms. By Joseph Bequaert. Pp. 79-87, 1 fig. Nov. 24, 1936.

3005. The nest of *Odynerus tempiferus* var. *macio* Bequaert, with notes on the habits of the wasps. By Austin H. Clark and Grace A. Sandhouse. Pp. 89-95. Nov. 24, 1936.

3006. Crested millipeds of the family Lysiopetalidae in North America, with descriptions of new genera and species. By H. F. Loomis. Pp. 97-135, 3 figs., 2 pls. May 15, 1937.

3007. Notes on phallostethid fishes. By George S. Myers. Pp. 137-143. Jan. 6, 1937.

3008. The deep-sea zeomorph fishes of the family Grammicolepidae. By George S. Myers. Pp. 145-156, 3 pls. Jan. 18, 1937.

3009. New North American species of earthworms of the family Megascolecidae. By Frank Smith. Pp. 157-181. Jan. 8, 1937.

3010. Observations on the trematode genus *Brachycoelium* Dujardin. By Elon E. Byrd. Pp. 183-199, 2 pls. Apr. 7, 1937.

3011. New muscoid flies (Diptera) in the United States National Museum. By David G. Hall. Pp. 201-216, 8 figs. Apr. 6, 1937.

3012. The pupa of *Myocera tabanivora* Hall (Diptera). By Charles T. Greene. Pp. 217-218, 1 fig. Apr. 6, 1937.

3013. A new subspecies of the nymphalid butterfly *Polygonia faunus*. By Austin H. Clark. Pp. 219-222, 1 pl. Apr. 9, 1937.

3014. A new species of trematode from the mud-eel (*Siren lacertina*). By C. Courson Zeliff. Pp. 223-226, 1 pl. May 4, 1937.

3015. Mexican fossil Echini. By Robert Tracy Jackson. Pp. 227-237, 4 pls. June 12, 1937.

3016. Two new beetles of the family Mordellidae from orchids. By Eugene Ray. Pp. 239-241. Apr. 21, 1937.

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3017. Revision of the North American species of ichneumon-flies of the genus *Exetastes* Gravenhorst. By R. A. Cushman. Pp. 243-312, 6 pls. July 3, 1937.

3018. A revision of the clapper rails (*Rallus longirostris* Boddaert). By Harry C. Oberholser. Pp. 313-354. June 30, 1937.

3019. Moths of the genus *Rupela* (Pyralididae: Schoenobiinae). By Carl Heinrich. Pp. 355-388, 12 pls. July 3, 1937.

3020. Synopsis of the Puerto Rican beetles of the genus *Mordellistena,* with descriptions of new species. By Eugene Ray. Pp. 389-399, 1 fig. June 26, 1937.

3021. Observations on the birds of West Virginia. By Alexander Wetmore. Pp. 401-441. Aug. 24, 1937.

3022. Annotated list of West Virginia mammals. By Remington Kellogg. Pp. 443-479. Oct. 7, 1937.

3023. On the detailed skull structure of a crested hadrosaurian dinosaur. By Charles W. Gilmore. Pp. 481-491, 6 figs. Oct. 12, 1937.

3024. Hydrocorals of the north Pacific Ocean. By Walter Kenrick Fisher. Pp. 493-554, 43 pls. Mar. 8, 1938.

3025. A giant new species of fairy shrimp of the genus *Branchinecta* from the State of Washington. By James E. Lynch. Pp. 555-562, 4 pls. Dec. 3, 1937.

3026. New species of moths of the family Notodontidae in the United States National Museum. By William Schaus. Pp. 563-584. Dec. 29, 1937.

Volume 85

Proceedings of the United States National Museum, vol. 84. Pp. i-x (title page, advertisement, table of contents, and list of illustrations); pp. 1-507 (Proceedings papers 3027-3040); pp. 509-530 (index); 39 figs., 101 pls. 1940.

3027. On some onychophores from the West Indies and Central America. By Austin H. Clark. Pp. 1-3. Nov. 5, 1937.

3028. Synopsis of the beetles of the Chilean genus *Phytholaema* (Scarabaeidae: Melolonthinae). By Lawrence W. Saylor. Pp. 5-11, 1 fig. Dec. 3, 1937.

3029. Redescription of the capelin *Mallotus catervarius* (Pennant) of the North Pacific. By Leonard P. Schultz. Pp. 13-20. Dec. 2, 1937.

3030. A Miocene booby and other records from the Calvert formation of Maryland. By Alexander Wetmore. Pp. 21-25, 2 figs. Jan. 14, 1938.

3031. Another fossil owl from the Eocene of Wyoming. By Alexander Wetmore. Pp. 27-29, 2 figs. Jan. 17, 1938.

3032. Descriptions of new fishes obtained by the United States Bureau of Fisheries steamer *Albatross,* chiefly in Philippine seas and adjacent waters. By Henry W. Fowler. Pp. 31-135, 56 figs. May 23, 1938.

3033. Evidence of Triassic insects in the Petrified Forest National Monument, Arizona. By M. V. Walker. Pp. 137-141, 4 pls. June 14, 1938.

3034. Review of the annelid worms of the family Nephtyidae from the northeast Pacific, with descriptions of five new species. By Olga Hartman. Pp. 143-158, 6 figs. June 8, 1938.

3035. A Miocene dog from Maryland. By Charles T. Berry. Pp. 159-161, 1 fig. Aug. 10, 1938.

3036. Revision of the Nearctic leafhoppers of the tribe Errhomenellini (Homoptera: Cicadellidae). By P. W. Oman. Pp. 163-180, 2 pls. May 27, 1938.

3037. A new genus and two new species of the dipterous family Phoridae. By Charles T. Greene. Pp. 181-185, 1 fig. June 27, 1938.

3038. A new genus and two new species of cottoid fishes from the Aleutian Islands. By Leonard P. Schultz. Pp. 187-191, 1 fig. May 12, 1938.

3039. The Cuban operculate land shells of the subfamily Chondropominae. By Carlos de la Torre and Paul Bartsch. Pp. 193-403, 31 figs., 33 pls. July 27, 1938.

3040. On some species of Chinese earthworms, with special reference to specimens collected in Szechwan by Dr. D. C. Graham. By G. E. Gates. Pp. 405-507. Mar. 20, 1939.

Volume 86

Proceedings of the United States National Museum, vol. 86. Pp. i-ix (title page, advertisement, table of contents, and list of illustrations); pp. 1-607 (Proceedings papers 3041-3065); pp. 595-626 (index); 71 figs., 71 pls. 1940.

Proc. No.

3041. Revision of the North American beetles of the staphylinid subfamily Tachyporinae—Part 2: Genus *Coproporus* Kraatz. By Richard E. Blackwelder. Pp. 1-10. Oct. 8, 1938.

3042. Descriptions of new and little-known fossil lizards from North America. By Charles W. Gilmore. Pp. 11-26, 9 figs., 1 pl. Dec. 16, 1938.

3043. The cambaloid millipeds of the United States, including a family new to the fauna and new genera and species. By H. F. Loomis. Pp. 27-66, 12 figs., 1 pl. Dec. 17, 1938.

3044. Polyclads of the east coast of North America. By A. S. Pearse. Pp. 67-98, 13 figs. Dec. 17, 1938.

3045. Hopewellian remains near Kansas City, Missouri. By Waldo R. Wedel. Pp. 99-106, 6 pls. Dec. 16, 1938.

3046. The types of the polychaete worms of the families Polynoidae and Polyodontidae in the United States National Museum and the description of a new genus. By Olga Hartman. Pp. 107-134, 7 figs. Dec. 7, 1938.

3047. Review of the fishes of the genera *Polyipnus* and *Argyropelecus* (family Sternoptichidae), with descriptions of three new species. By Leonard P. Schultz. Pp. 135-155, 4 figs. Dec. 27, 1938.

3048. Revision of the beetles of the melolonthine subgenus *Phytalus* of the United States. By Lawrence W. Saylor. Pp. 157-167, 2 pls. Feb. 15, 1939.

3049. New species of polychaete worms of the genus *Euphrosyne,* with notes on *Euphrosyne borealis* Orsted. By Aaron L. Treadwell. Pp. 169-173, 1 fig. Jan. 20, 1939.

3050. Notes on the birds of Tennessee. By Alexander Wetmore. Pp. 175-243. Jan. 31, 1939.

3051. Annotated list of Tennessee mammals. By Remington Kellogg. Pp. 245-303. Feb. 14, 1939.

3052. Species of the foraminiferal family Camerinidae in the Tertiary and Cretaceous of Mexico. By R. Wright Barker. Pp. 305-330, 12 pls. May 16, 1939.

3053. The cactus-feeding Phycitinae: A contribution toward a revision of the American pyralidoid moths of the family Phycitidae. By Carl Heinrich. Pp. 331-413, 29 pls. Mar. 16, 1939.

3054. Two new ophiurans from the Smithsonian-Hartford Expedition, 1937. By Hubert Lyman Clark. Pp. 415-418, 1 pl. Apr. 4, 1939.

3055. New species of flatworms from North, Central, and South America. By Libbie H. Hyman. Pp. 419-439, 5 figs. Apr. 14, 1939.

3056. Echinoderms of the Smithsonian-Hartford Expedition, 1937, with other West Indian records. By Austin H. Clark. Pp. 441-456, 2 pls. Apr. 5, 1939.

3057. A new cave isopod from Florida. By James O. Maloney. Pp. 457-459, 1 fig. May 26, 1939.

3058. Two new Atlantic species of dog sharks, with a key to the species of *Mustelus*. By Stewart Springer. Pp. 461-468, 3 figs. Apr. 27, 1939.

3059. A new sea star of the genus *Poraniopsis* from Japan. By Walter K. Fisher. Pp. 469-472, 1 fig., 2 pls. Apr. 4, 1939.

3060. A revision of the toadfishes referred to *Porichthys* and related genera. By Carl L. Hubbs and Leonard P. Schultz. Pp. 473-496, 1 fig. Apr. 29, 1939.

3061. A new genus of starfishes from the Aleutian Islands. By Austin H. Clark. Pp. 497-500, 1 pl. May 17, 1939.

3062. Eleven new species and three new genera of oceanic fishes collected by the International Fisheries Commission from the northeastern Pacific. By Wilbert McLeod Chapman. Pp. 501-542, 13 figs. Apr. 28, 1939.

Proc. No.

3063. New species of moths of the families Notodontidae and Bombycidae in the United States National Museum. By William Schaus. Pp. 543-561. May 18, 1939.

3064. Restriction of the genus *Gelechia* (Lepidoptera: Gelechiidae), with descriptions of new genera. By August Busck. Pp. 563-593, 14 pls. May 23, 1939.

3065. Neotropical flies of the family Stratiomyidae in the United States National Museum. By Maurice T. James. Pp. 595-607, 1 fig. Aug. 3, 1939.

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Proceedings of the United States National Museum, vol. 87. Pp. i-viii (title page, advertisement, table of contents, and list of illustrations); pp. 1-634 (Proceedings papers 3066-3077); pp. 635-672 (index); 157 figs., 19 pls. 1941.

3066. Ceratopsian dinosaurs from the Two Medicine formation, Upper Cretaceous of Montana. By Charles W. Gilmore. Pp. 1-18, 11 figs. Aug. 3, 1939.

3067. Two new parasitic isopods from the eastern coast of North America. By A. S. Pearse and Henry A Walker. Pp. 19-23, 2 figs. Aug. 1, 1939.

3068. The Hederelloidea, a suborder of Paleozoic cyclostomatous Bryozoa. By Ray S. Bassler. Pp. 25-91, 1 fig., 16 pls. Sept. 12, 1939.

3069. A generic revision of the staphylinid beetles of the tribe Paederini. By Richard E. Blackwelder. Pp. 93-125. Sept. 15, 1939.

3070. New turritid mollusks from Florida. By Paul Bartsch and Harald A. Rehder. Pp. 127-138, 1 pl. Sept. 15, 1939.

3071. A new trematode from the loon, *Gavia immer*, and its relationship to *Haematotrephus fodiens* Linton, 1928. By W. Carl Gower. Pp. 139-143, 1 fig. Sept. 1, 1939.

3072. A study of LeConte's types of the beetles in the genus *Monoxia*, with descriptions of new species. By Doris Holmes Blake. Pp. 145-171, 2 pls. Oct. 5, 1939.

3073. Observations on the birds of northern Venezuela. By Alexander Wetmore. Pp. 173-260. Nov. 3, 1939.

3074. A revision of the soapfishes of the genus *Rypticus*. By Leonard P. Schultz and Earl D. Reid. Pp. 261-270. Oct. 24, 1939.

3075. A taxonomic study of Neotropical beetles of the family Mordellidae, with descriptions of new species. By Eugene Ray. Pp. 271-314, 4 figs. Dec. 15, 1939.

3076. Catalog of human crania in the United States National Museum collections: Indians of the Gulf States. By Aleš Hrdlička. Pp. 315-464, 1 fig. May 18, 1940.

3077. Further studies on the opalinid ciliate infusorians and their hosts. By Maynard M. Metcalf. Pp. 465-634, 137 figs. Oct. 29, 1940.

Volume 88

Proceedings of the United States National Museum, vol. 88. Pp. i-viii (title page, advertisement, table of contents, and list of illustrations); pp. 1-586 (Proceedings papers 3078-3091); pp. 587-615 (index); 50 figs., 33 pls. 1942.

3078. Trematodes from fishes mainly from the Woods Hole region, Massachusetts. By Edwin Linton. Pp. 1-172, 26 pls. May 16, 1940.

3079. Report on certain groups of neuropteroid insects from Szechwan, China. By Nathan Banks. Pp. 173-220, 4 pls. Apr. 13, 1940.

3080. *Cestocrinus*, a new fossil inadunate crinoid genus. By Edwin Kirk. Pp. 221-224, 1 pl. Mar. 14, 1940.

3081. Notes on some pedunculate barnacles from the North Pacific. By Dora Priaulx Henry. Pp. 225-236, 5 figs. Apr. 20, 1940.

3082. Revision of the chalcid-flies of the tribe Chalcidini in America north of Mexico. By B. D. Burks. Pp. 237-354, 9 figs. June 11, 1940.

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3083. New genera and species of ichneumon-flies, with taxonomic notes. By R. A. Cushman. Pp. 355-372, 2 figs. Mar. 13, 1940.

3084. The scolytid beetles of the genus *Renocis* Casey, with descriptions of nine new species. By M. W. Blackman. Pp. 373-401, 2 figs. June 22, 1940.

3085. Two new genera and three new species of cheilodipterid fishes, with notes on the other genera of the family. By Leonard P. Schultz. Pp. 403-423, 2 figs. Apr. 26, 1940.

3086. A contribution to the knowledge of the Eucharidae (Hymenoptera: Chalcidoidea). By A. B. Gahan. Pp. 425-458. Apr. 25, 1940.

3087. A review of the parasitic Crustacea of the genus *Argulus* in the collections of the United States National Museum. By O. Lloyd Meehan. Pp. 459-522, 27 figs. June 22, 1940.

3088. The ichneumon-flies of the subfamily Neorhacodinae, with descriptions of a new genus and three new species. By R. A. Cushman. Pp. 523-527, 1 fig. Apr. 13, 1940.

3089. Notes on the birds of Kentucky. By Alexander Wetmore. Pp. 529-574. Apr. 23, 1940.

3090. Seven new species and one new genus of hydroids, mostly from the Atlantic Ocean. By C. McLean Fraser. Pp. 575-580, 2 pls. Sept. 13, 1940.

3091. A prehistoric roulette from Wyandotte County, Kansas. By Waldo R. Wedel and Harry M. Trowbridge. Pp. 581-586, 2 figs. June 5, 1940.

Volume 89

Proceedings of the United States National Museum, vol. 89. Pp. i-ix (title page, advertisement, table of contents, and list of illustrations); pp. 1-581 (Proceedings papers 3092-3105); pp. 583-620 (index); 31 figs., 62 pls. 1942.

3092. A revision of the West Indian beetles of the scarabaeid subfamily Aphodiinae. By Edward A. Chapin. Pp. 1-41. May 23, 1940.

3093. Two new anuran amphibians from Mexico. By Edward H. Taylor. Pp. 43-47, 3 pls. Aug. 13, 1940.

3094. The west American *Haliotis*. By Paul Bartsch. Pp. 49-58, 3 pls. Aug. 15, 1940.

3095. Revision of the scarabaeid beetles of the phyllophagan subgenus *Listrochelus* of the United States, with discussion of related subgenera. By Lawrence W. Saylor. Pp. 59-130, 13 figs. Nov. 15, 1940.

3096. The Cuban operculate land mollusks of the family Annulariidae, exclusive of the subfamily Chondropominae. By Carlos de la Torre and Paul Bartsch. Pp. 131-385, 49 pls. Pp. i-x (index). Apr. 2, 1941.

3097. Seven new crayfishes of the genus *Cambarus* from Florida, with notes on other species. By Horton H. Hobbs, Jr. Pp. 387-423, 9 figs. Nov. 23, 1940.

3098. Echinoderms from Greenland collected by Capt. Robert A. Bartlett. Pp. 425-433, 2 pls. Feb. 27, 1941.

3099. A revision of the keyhole urchins (*Mellita*). By Hubert Lyman Clark. Pp. 435-444, 3 pls. Dec. 12, 1940.

3100. *Eurhoptodes*, a remarkable new genus of Philippine cryptorhynchine weevils. By Elwood C. Zimmerman. Pp. 445-448, 1 fig. Nov. 1, 1940.

3101. The polyclad flatworms of the Atlantic coast of the United States and Canada. By Libbie H. Hyman. Pp. 449-495, 8 figs. Feb. 27, 1941.

3102. New species of heterocerous moths in the United States National Museum. By William Schaus. Pp. 497-511. Mar. 6, 1941.

3103. *Dinotocrinus*, a new fossil inadunate crinoid genus. By Edwin Kirk. Pp. 513-517, 1 pl. Feb. 28, 1941.

3104. A supposed jellyfish from the pre-Cambrian of the Grand Canyon. By R. S. Bassler. Pp. 519-522, 1 pl. Feb. 27, 1941.

3105. Notes on birds of the Guatemalan Highlands. By Alexander Wetmore. Pp. 523-581. Mar. 26, 1941.

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Proceedings of the United States National Museum, vol. 90. Pp. i-vii (title page, advertisement, table of contents, and list of illustrations); pp. 1-551 (Proceedings papers 3106-3120); pp. 553-581 (index); 24 figs., 74 pls. 1942.

Proc. No.

3106. New fishes of the family Callionymidae, mostly Philippine, obtained by the United States Bureau of Fisheries steamer *Albatross*. By Henry W. Fowler. Pp. 1-31, 16 figs. Apr. 8, 1941.

3107. Revision of the North American moths of the family Oecophoridae, with descriptions of new genera and species. By J. F. Gates Clarke. Pp. 33-286, 48 pls. Pp. i-viii (index). Nov. 6, 1941.

3108. Synopsis of the tachinid flies of the genus *Tachinomyia*, with descriptions of new species. By Ray T. Webber. Pp. 287-304, 1 fig. June 30, 1941.

3109. A history of the Division of Vertebrate Paleontology in the United States National Museum. By Charles W. Gilmore. Pp. 305-377, 5 pls. Aug. 5, 1941.

3110. A new harpacticoid copepod from the gill chambers of a marsh crab. By Arthur G. Humes. Pp. 379-386, 1 fig. Aug. 5, 1941.

3111. The Chicora (Butler County, Pa.) meteorite. By F. W. Preston, E. P. Henderson, and James R. Randolph. Pp. 387-416, 1 fig., 6 pls. June 17, 1941.

3112. Cestode parasites of teleost fishes of the Woods Hole region, Massachusetts. By Edwin Linton. Pp. 417-442, 3 pls. July 15, 1941.

3113. Pamlico fossil echinoids. By Willard Berry. Pp. 443-445, 3 pls. July 5, 1941.

3114. A new genus of sea stars (*Plazaster*) from Japan, with a note on the genus *Parasterina*. By Walter K. Fisher. Pp. 447-456, 3 figs., 5 pls. June 18, 1941.

3115. Notes on Mexican turtles of the genus *Kinosternon*. By Leonhard Stejneger. Pp. 457-459. July 25, 1941.

3116. A revision of the chalcid-flies of the genus *Monodontomerus* in the United States National Museum. By A. B. Gahan. Pp. 461-482. Aug. 19, 1941.

3117. Notes on the birds of North Carolina. By Alexander Wetmore. Pp. 483-530. Oct. 31, 1941.

3118. Notes on some North and Middle American danaid butterflies. By Austin H. Clark. Pp. 531-542, 4 pls. Nov. 4, 1941.

3119. A new genus of psammocharid wasp from China. By P. P. Babiy. Pp. 543-546, 1 fig. Oct. 24, 1941.

3120. Two new species of cecidomyiid flies from phlox. By Charles T. Greene. Pp. 547-551, 1 fig. Oct. 30, 1941.

Volume 91

Proceedings of the United States National Museum, vol. 91. Pp. i-viii (title page, advertisement, table of contents, and list of illustrations); pp. 1-520 (Proceedings papers 3121-3132); pp. 521-529 (index); 64 figs., 28 pls. 1943.

3121. The mammalian faunas of the Paleocene of central Utah, with notes on the geology. By C. Lewis Gazin. Pp. 1-53, 29 figs., 3 pls. Oct. 2, 1941.

3122. A new fossil crocodilian from Colombia. By Charles C. Mook. Pp. 55-58, 6 pls. Jan. 17, 1942.

3123. The North American moths of the genus *Arachnis*, with one new species. By J. F. Gates Clarke. Pp. 59-70, 3 pls. Nov. 14, 1941.

3124. Some little-known fossil lizards from the Oligocene of Wyoming. By Charles W. Gilmore. Pp. 71-76, 3 figs. Nov. 13, 1941.

3125. New species of hydroids, mostly from the Atlantic Ocean, in the United States National Museum. By C. McLean Fraser. Pp. 77-89, 6 pls. Nov. 14, 1941.

3126. The Nevada early Ordovician (Pogonip) sponge fauna. By R. S. Bassler. Pp. 91-102, 6 pls. Nov. 1, 1941.

3127. The Mexican subspecies of the snake *Coniophanes fissidens*. By Hobart M. Smith. Pp. 103-111, 1 fig. Nov. 13, 1941.

Proc. No.

3128. Report on the Smithsonian-Firestone Expedition's collection of reptiles and amphibians from Liberia. By Arthur Loveridge. Pp. 113-140, 1 fig. Nov. 14, 1941.

3129. Notes on some crayfishes from Alabama caves, with the description of a new species and a new subspecies. By Rendell Rhoades. Pp. 141-148, 2 figs. Nov. 6, 1941.

3130. Notes on the snake genus *Trimorphodon.* By Hobart M. Smith. Pp. 149-168, 2 figs. Nov. 10, 1941.

3131. Catalog of human crania in the United States National Museum collections: Eskimo in general. By Aleš Hrdlička. Pp. 169-429, 1 fig. Aug. 1, 1942.

3132. The species of *Aegla,* endemic South American fresh-water crustaceans. By Waldo L. Schmitt. Pp. 431-520, 25 figs., 4 pls. Aug. 18, 1942.

Volume 92

Proceedings of the United States National Museum, vol. 92. Pp. i-viii (title page, advertisement, table of contents, and list of illustrations); pp. 1-619 (Proceedings papers 3133-3156); pp. 621-668 (index); 47 figs., 43 pls. 1943.

3133. Notes on two genera of American flies of the family Trypetidae. By John R. Malloch. Pp. 1-20, 1 fig. Jan. 7, 1942.

3134. The Freda, N. Dak., meteorite: a nickel-rich ataxite. By E. P. Henderson and Stuart H. Perry. Pp. 20-23, 4 pls. Mar. 23, 1942.

3135. Some cestodes from Florida sharks. By Asa C. Chandler. Pp. 25-31, 2 figs. Feb. 9, 1942.

3136. A new species of phyllopod crustacean from the southwestern short-grass prairies. By J. G. Mackin. Pp. 33-39, 3 figs. Apr. 15, 1942.

3137. Descriptions of five new species of Chalcidoidea, with notes on a few described species (Hymenoptera.) By A. B. Gahan. Pp. 41-51. Mar. 4, 1942.

3138. A new stomatopod crustacean from the west coast of Mexico. By Steve A. Glassell. Pp. 53-56, 1 fig. Mar. 26, 1942.

3139. The chrysomelid beetles *Luperodes bivittatus* (LeConte) and *varicornis* (LeConte) and some allied species. By Doris H. Blake. Pp. 57-74, 2 pls. Apr. 7, 1942.

3140. Notes on the classification of the staphylinid beetles of the groups Lispini and Osoriinae. By Richard E. Blackwelder. Pp. 75-90. Apr. 7, 1942.

3141. Scored bone artifacts of the central Great Plains. By W. R. Wedel and A. T. Hill. Pp. 91-100, 7 pls. Apr. 28, 1942.

3142. The identity of some marine annelid worms in the United States National Museum. By Olga Hartman. Pp. 101-140, 8 figs. June 10, 1942.

3143. The Sardis (Georgia) meteorite. By E. P. Henderson and C. Wythe Cooke. Pp. 141-150, 2 pls. Apr. 30, 1942.

3144. *Rhopocrinus,* a new fossil inadunate crinoid genus. By Edwin Kirk. Pp. 151-155, 1 pl. Apr. 24, 1942.

3145. Notes on beetles related to *Phyllophaga* Harris, with descriptions of new genera and subgenera. By Lawrence W. Saylor. Pp. 157-165, 1 pl. June 11, 1942.

3146. Descriptions of the larvae of some West Indian melolonthine beetles and a key to the known larvae of the tribe. By Adam G. Böving. Pp. 167-176, 2 pls. June 13, 1942.

3147. New species of bark beetles (Pityophthorini) from Mexico and tropical America (Coleoptera, Scolytidae). By M. W. Blackman. Pp. 177-228, 4 pls. Nov. 25, 1942.

3148. Osteology of *Polyglyphanodon,* an Upper Cretaceous lizard from Utah. By Charles W. Gilmore. Pp. 229-265, 21 figs., 3 pls. Oct. 13, 1942.

3149. Notes and new species of Microlepidoptera from Washington State. By J. F. Gates Clarke. Pp. 267-276, 6 pls. Oct. 13, 1942.

3150. The genotypes of some of Ashmead's genera of ichneumon-flies. By R. A. Cushman. Pp. 277-289. Oct. 8, 1942.

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Proc. No.

3151. New Neotropical insects of the apterygotan family Japygidae. By H. E. Ewing and Irving Fox. Pp. 291-299, 2 pls. Oct. 1, 1942.

3152. The fresh-water fishes of Liberia. By Leonard P. Schultz. Pp. 301-348, 1 fig., 2 pls. Nov. 13, 1942.

3153. Mexican herpetological miscellany. By Hobart M. Smith. Pp. 349-395, 1 fig., 1 pl. Nov. 5, 1942.

3154. Revision of the genus *Phloeosinus* Chapuis in North America (Coleoptera, Scolytidae). By M. W. Blackman. Pp. 397-474, 4 pls. Dec. 21, 1942.

3155. The late Cenozoic vertebrate faunas from the San Pedro Valley, Ariz. By C. Lewis Gazin. Pp. 475-518, 9 figs., 2 pls. Dec. 10, 1942.

3156. The type species of the genera and subgenera of bees. By Grace A. Sandhouse. Pp. 519-619. Mar. 5, 1943.

Volume 93

Proceedings of the United States National Museum, vol. 93. Pp. i-viii (title page, advertisement, table of contents, and list of illustrations); pp. 1-608 (Proceedings papers 3157-3170); pp. 609-647 (index); 21 figs., 32 pls. 1944.

3157. The Nearctic species of parasitic flies belonging to *Zenillia* and allied genera. By Wendell F. Sellers. Pp. 1-108. Jan. 19, 1943.

3158. A new fossil reptile from the Upper Cretaceous of Utah. By Charles W. Gilmore. Pp. 109-114, 5 figs. Dec. 12, 1942.

3159. Some American geometrid moths of the subfamily Ennominae heretofore associated with or closely related to *Ellopia* Treitschke. By Hahn W. Capps. Pp. 115-151, 10 pls. Feb. 24, 1943.

3160. Skeletal remains with cultural associations from the Chicama, Moche, and Virú Valleys, Peru. By T. D. Stewart. Pp. 153-185, 8 pls. Jan. 23, 1943.

3161. New marine mollusks from the Antillean region. By Harald A. Rehder. Pp. 187-203, 2 pls. Jan. 20, 1943.

3162. A new pest of *Albizzia* in the District of Columbia (Lepidoptera: Glyphipterygidae). By J. F. Gates Clarke. Pp. 205-208, 5 pls. Mar. 9, 1943.

3163. Osteology of Upper Cretaceous lizards from Utah, with a description of a new species. By Charles W. Gilmore. Pp. 209-214, 5 figs. Jan. 19, 1943.

3164. The birds of southern Veracruz, Mexico. By Alexander Wetmore. Pp. 215-340, 1 fig., 3 pls. May 25, 1943.

3165. New genera and species of bark beetles of the subfamily Micracinae (Scolytidae, Coleoptera). By M. W. Blackman. Pp. 341-365, 2 pls. Mar. 22, 1943.

3166. Notes on some barnacles from the Gulf of California. By Dora Priaulx Henry. Pp. 367-373, 1 pl. May 3, 1943.

3167. New species of buprestid beetles of the genus *Agrilus* from Trinidad. By W. S. Fisher. Pp. 375-380. July 26, 1943.

3168. Some fungus beetles of the family Endomychidae in the United States National Museum, mostly from Latin America and the Philippine Islands. By H. F. Strohecker. Pp. 381-392, 1 fig. Aug. 5, 1943.

3169 Summary of the collections of snakes and crocodilians made in Mexico under the Walter Rathbone Bacon Traveling Scholarship. By Hobart M. Smith. Pp. 393-504, 3 figs., 1 pl. Oct. 29, 1943.

3170. The North American parasitic wasps of the genus *Tetrastichus*—a contribution to biological control of insect pests. By B. D. Burks. Pp. 505-608, 6 figs. Oct. 26, 1943.

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Proceedings of the United States National Museum, vol. 94. Pp. i-vi (title page, advertisement, table of contents, and list of illustrations); pp. 1-582 (Proceedings papers 3171-3177); pp. 583-598 (index); 34 pls., 157 figs. 1944.

Proc. No.

3171. Catalog of human crania in the United States National Museum collections: Non-Eskimo people of the Northwest coast, Alaska, and Siberia. By Aleš Hrdlička. Pp. 1-172. Apr. 6, 1944.

3172. The catfishes of Venezuela, with descriptions of thirty-eight new forms. By Leonard P. Schultz. Pp. 173-338, 5 figs., 14 pls. Feb. 11, 1944.

3173. Revisions of two genera of chalcid-flies belonging to the family Eupelmidae from North and South America. By A. B. Gahan. Pp. 339-369. Nov. 26, 1943.

3174. New species of American scolytoid beetles, mostly Neotropical. By M. W. Blackman. Pp. 371-399, 3 pls. Nov. 22, 1943.

3175. A revision of the Embioptera, or web-spinners, of the New World. By Edward S. Ross. Pp. 401-504, 151 figs., 2 pls. Jan. 19, 1944.

3176. Twelve new species of Chinese leaf-katydids of the genus *Xiphidiopsis*. By Ernest R. Tinkham. Pp. 505-527, 1 fig. Apr. 29, 1944.

3177. Parasitic copepods in the United States National Museum. By Charles Branch Wilson. Pp. 529-582, 15 pls. July 10, 1944.

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3178. New American cynipids from galls. By Lewis H. Weld. Pp. 1-24, 2 pls. Apr. 15, 1944.

3179. A collection of birds from northern Guanacaste, Costa Rica. By Alexander Wetmore. Pp. 25-80, 4 pls. July 7, 1944.

3180. Studies in Neotropical Mallophaga (III): Tinamidae No. 2. By M. A. Carriker, Jr. Pp. 81-233, 29 figs. Oct. 10, 1944.

3181. The fishes of the family Characinidae from Venezuela, with descriptions of seventeen new forms. By Leonard P. Schultz. Pp. 235-367, 27 figs. Sept. 6, 1944.

3182. New genera and species of Oriental and Australian plant bugs in the United States National Museum. By Tsai-Yu Hsiao. Pp. 369-396, 1 fig. Aug. 5, 1944.

3183. New species of buprestid beetles from Trinidad. By W. S. Fisher. Pp. 397-409. July 22, 1944.

3184. The Fulgoroidea, or lanternflies, of Trinidad and adjacent parts of South America. By R. G. Fennah. Pp. 411-520, 11 pls. May 24, 1945.

3185. Summary of the collections of amphibians made in Mexico under the Walter Rathbone Bacon Traveling Scholarship. By Edward H. Taylor and Hobart M. Smith. Pp. 521-613, 4 figs., 15 pls. Jan. 30, 1945.

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3187. A revision of the American clingfishes, family Gobiesocidae, with descriptions of new genera and forms. By Leonard P. Schultz. Pp. 47-77, 1 pl. Dec. 30, 1944.

3188. New beetles of the family Eucnemididae from Central America and the West Indies. By W. S. Fisher. Pp. 79-93. May 8, 1945.

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3189. New lanternflies (Fulgoroidea) from South America. By R. G. Fennah. Pp. 95-104, 2 pls. May 9, 1945.

3190. The genus *Fundella* Zeller: A contribution toward a revision of the American pyralidoid moths of the family Phycitidae. By Carl Heinrich. Pp. 105-114, 3 pls. May 18, 1945.

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3193. The ichneumon-flies of the genus *Cryptanura* Brullé, mainly tropical American. By R. A. Cushman. Pp. 139-176. May 23, 1945.

3194. Neotropical lanternflies of the genus *Phrictus* in the United States National Museum, with descriptions of four new species. By John S. Caldwell. Pp. 177-184, 4 pls. May 16, 1945.

3195. *Hyporhamphus patris,* a new species of hemiramphid fish from Sinaloa, Mexico, with an analysis of the generic characters of *Hyporhamphus* and *Hemiramphus.* By Robert R. Miller. Pp. 185-193, 1 fig., 1 pl. July 27, 1945.

3196. Notes on recently mounted reptile fossil skeletons in the United States National Museum. By Charles W. Gilmore. Pp. 195-203, 8 pls. Feb. 5, 1946.

3197. The onychophores of Panama and the Canal Zone. By Austin H. Clark and James Zetek. Pp. 205-213. Feb. 21, 1946.

3198. Echiuroid worms of the North Pacific Ocean. By Walter Kenrick Fisher. Pp. 215-292, 10 figs., 18 pls. Apr. 11, 1946.

3199. The osteology of the fossil turtle *Testudo praeextans* Lambe, with notes on other species of *Testudo* from the Oligocene of Wyoming. By Charles W. Gilmore. Pp. 293-310, 8 figs., 7 pls. Mar. 28, 1946.

3200. Eight new species of chalcid-flies of the genus *Pseudaphycus* Clausen, with a key to the species. By A. B. Gahan. Pp. 311-327. Nov. 22, 1946.

3201. New cerambycid beetles belonging to the tribe Disteniini from Central and South America. By W. S. Fisher. Pp. 329-333. Nov. 26, 1946.

3202. *Machaeroides eothen* Matthew, the sabertooth creodont of the Bridger Eocene. By C. Lewis Gazin. Pp. 335-347, 2 pls. Dec. 16, 1946.

3203. Review of some chalcidoid genera related to *Cerocephala* Westwood. By A. B. Gahan. Pp. 349-376, 2 pls. Dec. 31, 1946.

3204. A revision of the genera of mullets, fishes of the family Mugilidae, with descriptions of three new genera. By Leonard P. Schultz. Pp. 377-395, 5 figs. Dec. 5, 1946.

CIRCULARS [1]

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1. Plan of organization and regulations. By G. Brown Goode. Pp. 1-58. 1881.
2. Circular addressed to friends of the Museum. By Spencer F. Baird. Pp. 1-2. 1881.
3. Circular in reference to petroleum collections. By S. F. Baird. Pp. 1-2. 1881.
4. Circular concerning the department of insects. By Spencer F. Baird. 1 p. 1881.
5. Establishment and officers. Pp. 1-2. 1881.
6. Classification and arrangement of the materia medica collection. By James M. Flint. Pp. 1-2. 1881.
7. A classification of the forms in which drugs and medicines appear, and are administered. By James M. Flint. Pp. 1-7. 1881.
8. Memoranda for collectors of drugs for the materia medica section of the National Museum. By James M. Flint. Pp. 1-2. 1881.
9. Circular in reference to the building-stone collection. By Spencer F. Baird. Pp. 1-6. 1881.
10. Two letters on the work of the National Museum. By Barnet Phillips. Pp. 1-10. 1881.
11. A provisional classification of the food collections. By G. Brown Goode. Pp. 1-22. 1881.
12. Classification of the collection to illustrate the art of taxidermy. By William T. Hornaday. Pp. 1-2. 1881.
13. Outline of a scheme of Museum classification. By G. Brown Goode. Pp. 1-4. 1881.
14. Circular requesting material for the library. By Spencer F. Baird. Pp. 1-3. 1881.
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17. Contributions and their acknowledgment. 1 p. 1881.
18. List of publications of the United States National Museum. Pp. 1-12. 1881.
19. Classification of the materia medica collection of the U. S. National Museum, and catalogue of specimens. By James M. Flint. Pp. 1-45. 1883.
20. Request for specimens of drugs and information concerning them. By Spencer F. Baird. 1 p. 1883.
21. Circular relative to contributions of aboriginal antiquities to the United States National Museum. By Charles Rau. 5 pp. 1883.
22. Brief directions for removing and preserving the skins of mammals. By Wm. T. Hornaday. 7 pp., 4 figs. 1883.
23. Instructions for taking paper molds of inscriptions in stone, wood, bronze, etc. Prepared by A. P. Niblack. 5 pp. 1883.
24. Plan of a collection to illustrate the textile industries of the United States, to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884-1885, at New Orleans. By Romyn Hitchcock. Pp. 1-16. 1884.
25. Preliminary plan for a collection of the building and ornamental stones and rocks of the United States, to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884-1885, at New Orleans. By George P. Merrill. Pp. 1-2. 1884.
26. Plan for a collection of gems and precious stones, to be exhibited at the Cincinnati Industrial Exposition and the World's Industrial and Cotton Centennial Exposition of 1884-1885, at New Orleans. By F. W. Clarke. Pp. 1-2. 1884.
27. Directions for collecting, preserving, and transporting tortricids and other small moths. By C. H. Fernald. Pp. 1-3. 1884.
28. Directions for mound exploration. By Cyrus Thomas. Pp. 1-3. 1884.
29. Provisional plan for a collection of mammals to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884-'85, at New Orleans. By Frederick W. True. Pp. 1-27. 1884.

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[1] Circulars 1-18 reprinted in Proc. U. S. Nat. Mus., vol. 4; 19-23, vol. 6; 24-31, vol. 7; 32 and 33, vol. 8; 35, Rep. U. S. Nat. Mus. for 1886; 37, Proc. U. S. Nat. Mus., vol. 10.

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30. A list of birds the eggs of which are wanted to complete the series in the National Museum, with instructions for collecting eggs. By Charles E. Bendire. Pp. 1-4. 1884.
31. Plan to illustrate the mineral resources of the United States and their utilization, at the World's Industrial and Cotton Centennial Exposition of 1884-1885, at New Orleans. By Fred. P. Dewey. Pp. 1-8. 1884.
32. Classification of the materia medica collection of the U. S. National Museum, and catalogue of specimens. By James M. Flint. (Revised and extended by Henry G. Beyer). Pp. 1-39. 1885.
33. Notes on the preparation of rough skeletons. By Frederic A. Lucas. Pp. 1-8, 12 figs.
34. Circular for the guidance of persons desiring to make exchanges of birds or birds' eggs with the National Museum. 1 p. 1886.
35. Concerning the lending of type specimens. By Spencer F. Baird. 1 p. 1886.
36. Circular concerning the department of antiquities. By S. P. Langley. 1 p., 5 pls. 1887.
37. Catalogue of the contributions of the section of graphic arts to the Ohio Valley Centennial Exposition, Cincinnati, 1888. By S. R. Koehler. 31 pp. 1887.
38. Contributions of the department of transportation and engineering to the Ohio Valley Centennial Exhibition, 1888. By J. Elfreth Watkins. Pp. 1-18. 1888.
39. The contribution of the section of Oriental antiquities to the Ohio Valley Centennial Exhibition. By Cyrus Adler. Pp. 1-7. 1888.
40. Description of exhibit made by the department of prehistoric anthropology in the National Museum at the Ohio Valley and Central States Exposition in Cincinnati, Ohio, 1888. By Thomas Wilson. Pp. 1-33, 50 figs. 1888.
41. Guide to a collection illustrating the families of mammals, exhibited in the Ohio Valley Centennial Exposition in 1888 by the U. S. National Museum. By Frederick W. True. Pp. 1-26. 1888.
42. Circular relating to prehistoric anthropology. By Thomas Wilson. Pp. 1-16, 4 figs. 1888.
43. To the correspondents of the U. S. National Museum. [With a view to securing accessions for the library.] By G. Brown Goode. 1 p. 1894.
44. To the correspondents of the U. S. National Museum. [With a view to securing publications for the library in exchange.] By G. Brown Goode. Pp. 1-8. 1894.
45. To the correspondents of the U. S. National Museum. [With a view to securing authors' separates and reprints for the library.] By G. Brown Goode. 1 p. 1894.
46. [On the proposed revision of Bulletin 22, relating to the flora of the District of Columbia.] By G. Brown Goode. 2 pp. 1895.
47. Circular in regard to the identification of specimens of mollusks by the National Museum. By G. Brown Goode. 2 pp. 1895.
48. Circular in regard to bones and teeth of the mastodon and mammoth. By Frederic A. Lucas. Pp. 1-4, 2 figs. 1897.
49. [Relating to the North American Violaceae.] By Frederick W. True. 1 p. 1899.
50. [Transmitting questions relating to birds and birds' eggs.] By Richard Rathbun. 3 pp. 1901.
51. Circular to accompany collections illustrating rock-weathering and soil-formation which have been prepared by the department of geology, U. S. National Museum, under direction of Dr. George P. Merrill, head curator. Pp. 1-3. Dec. 1, 1901.
52. Circular to accompany collections illustrating rock-weathering and soil-formation which have been prepared by the department of geology, U. S. National Museum. Pp. 1-2. 1928.
53. Mammoths and mastodons. By James W. Gidley. Pp. 1-5, 2 figs. Jan. 28, 1929.

CLASSIFIED INDEX TO TITLES

Prepared by GLADYS O. VISEL

The index that follows is intended as a finding-index to the titles and authors of the publicatons listed in the foregoing pages. It does not attempt to go beyond the titles to index the detailed contents of the papers, as this would require a work of many times this size.[1] For example, under the locality *California* a user of the index would not be referred to every Museum publication that might include California in its scope. Localities are included only when they appear in the titles. The large categories *America* and *North America* have usually not been indexed even when they appear in the titles, as they are too numerous and general to make their indexing of any value. Countries of South America, Africa, Asia, Australia, etc., generally have not been included under the continent except where the latter appears in the title; these countries appear in their alphabetical place in the Index. In general, subjects are broken down into the main divisions of curatorial and research work with which the National Museum is concerned and which is reflected in its publications. Here again the user should not expect to find under any one subject a complete catalog of information. A general paper on insects, for example, might contain information on many families and groups, but since the names of these would not appear in the title of the paper as listed they would not appear in the index (except perhaps in other connections). A paper entitled "The Birds of Ecuador" would be indexed under *Birds* and under *Ecuador,* but not under *Warblers* although this group might occupy a large portion of the paper; whereas a paper on "The Warblers of Ecuador" would be indexed under *Birds, Warblers,* under *Warblers* (*see Birds*), and under *Ecuador, Warblers,* but not under *Ecuador, Birds.* In other words, although this is a *classified Index,* the user must remember that in the natural-history sections entries have not been reassembled under the geographic groups for the sake of systematic completeness; he will find, for example, under South America, entries under Hymenoptera, Diptera, moths, etc., but these have not been assembled under Insects. The reader will find also that absolute uniformity of treatment has occasionally been sacrificed for the sake of brevity and expediency. An instance of this will be found in the class Insecta, which because of its size has been subdivided into its various orders; in other classes of animals this has not been done. Cross-references have been freely used to avoid duplication and to reduce the size of the index.

[1] A comprehensive, detailed index of National Museum publications has been in preparation in the Editorial Office of the Museum for several years and is completed to the year 1900. It is in the form of a 3-by-5 card file and comprises to date about 235,000 cards. It may be consulted in the Editor's Office, Smithsonian Building, by anyone interested.

Key to Abbreviations of Series

B: Bulletin

C: Circular

CNH: Contributions from the National Herbarium

P: Proceedings

R: Annual Report

SB: Special Bulletin

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